[Idaw Geryun]

133 /42/ timezgida, "sanctuary," of one Mulay Âli, an unidentified
10 personage. A hole dug in the middle of the ruins expresses the
634 preoccupations, common in the Maghreb, of treasure hunters.
[778] An abundant and heavy humidity. On the North versant itself,
[772] at about 300 meters from the summit, an icy spring spouts a
[312] weak streamlet. From this belvedere the panorama is enormous:
Taroudant on one side, the Chichaoua plain on the other, a deep
E.-W. perspective on the axial chain. Between the two pyramids
of the Tanddri and the Ras Mulay Âli, the valley is closed by a
wall: the edge of the Tichka, dominated by the Tassyut and the
Mssddat. But let us continue to follow the slope from Targa
Ufella.

Immediately at the foot of the descent, the ground of Tam-
137 gonsi, from Igezwan to Rekto, draws up in echelons its shady
[133] cultivations on fairly wide ledges of the bed, especially before
Alus. A bucolic thicket, Azerwal, is buried beneath the heavy
[778] foliage of the walnut trees. Then, a sanctuary, that of Sidi
[133] Lah'sen u Tiqqi, "Monsieur of the juniper." From there, the asif
Lh'lu, which the old documents call Wâdi't-tuffâh, "the river of
the apple trees," opens in the direction of the Ras Mulay Âli.
[173] These trees are not to be found now. But their species furnished
[824] so much, people say, only a generation ago, that the sale of the
[437] fruit was enough for the canton to procure barley. Some wild
shoots remain. Similarly, wild cherry trees, asemlal, perhaps
[226] indicate old cherry trees. Today, only fishing, the apricot tree,
[824] and the plum tree are exploited. All in a luxuriance of flowers
and bushes, among them the "briar," tikhfert. Rich in freshness,
color, and variety.

133 The principal branch of the valley descends toward the Sek-
101 sawa. Its flanks are studded with populations of "opuntia,"
634 aknari, always associated here with former human habitats. There
[103] are several abandoned ones. Let us note in passing some instruc-
tive names: the mosque of the Vizier, and the "marabout" Sidi
Jâmâ, "Monsieur-Mosquée" /Mister Mosque/, between Rekto and
Ighelmellen. The valley opens up in a wider and wider chasm
on an "Entre-deux torrents" /Between torrents/, the village of
Igersafen. Another country, that of the a. H'adduyws, starts
there.

[Iguntar]

619
101 /45 cont./
184 the moment when new and brave men from the far Sous liberated
634 the old ground with the help of the saints.

133 A dizzy descent, from the wooded heights of the Wagrarat,
101 leads to a bed of wells. The torrent of the Iguntar passes here.
634 They have their two villages: Tagenza and Tannammert, "the
361 fronton and the adret," planted at mid-cliff. At Tagenza, ruins
619 of an agadir, "granary-citadel," the only one of the country with that of Ikis. The Atlasic arête is welded to the last counterfort of the Bwibaun, this long Hercynian wall which closes the Seksawa world to the W. The Arjbib, the Zkkat' have from 2,400 to 2,890 meters. This is the impasse. The Idaw Meh'mud indeed live on the other side of the peak, but it is the other side of the world. Even if the ridge pastures are common, a radical opposition governs the life on the two sides. People turn their backs on each side of the wall.

193 The true relatives of the Iguntar are elsewhere, among the
101 remains of the Demsira. The old records of this tribe show them
634 regulating by their deliberations interests more or less mingled
619 with those of the Irohalen, thus largely running over toward the
[538] Tizi Umachchô. Their legend mentions a founder hero and great ancestors who built the countries bnan timizar, an expression of
[613] substantial exactitude. Their nine séguias and their five ikhs-s
[312] interlace rights and facilities in a system of distribution of water and land. There remain to us reports of proceedings concerning an allotment which was formerly carried out and followed by collective feasting.

634 The same archaic and secret life, the same Arcadian life,
184 with the ancestral wisdom, the same energetic submission to the
619 laws of the country and of the economy also strike you in another
[181] taqbilt of the high mountains: the a. Mh'nd. Between Iguntar and a. Mh'nd, similarly with their backs to the high axial ridge, are crouched other cantons, formerly conquered or reconquered by the Seksawa over the Demsira: Wanz'id and Iwulla. But these are drawn downstream by their solidarity with their brothers of the branch conquering the a. Lh'sen.

619 [Idma]

181 /46 cont./

634 remained faithful, up to their last independent amghar-s, to a
101 tortuous and violent tradition. Their type has been safeguarded.
175 It is striking because of a strange dullness of skin, almost blue
[166] sometimes, and which indeed seems to reflect the imprisonment
[142] between these high and terrifying walls. "Profiteers and marauders," as the Pyrenean chronicler says of another such mountain people, expanding the meaning of plunder into broad political conceptions, the /47/ Idma have spread in the direction of Z'init', over a large section of the river and up to the bar of the Afuzar to the E.; over an affluent valley, that of Ammern to the W.; and over all the highlands between the two. In order to understand by what dynamics this meeting of grounds could be made, it is necessary to climb the counterforts of the Tabgurt. Let us place ourselves at an observation point situated at 2,300 meters, just under the little source streamlet called Talat n-a. Ilarzg.

One discovers before one, downwards, the ground of Agersili,
133 at the foot of an uneven ridge, which points to the Awrir Waluggu.
241 It is a vast ensemble of suspended valleys, on flanks prodigiously
101 cut by terraces. We are in May. The green of the barley not yet
634 in ear -- for the year is late here, and snow has persisted for several months on the tilled fields -- is arranged with the light ocher, carefully squared and rebordered like honeycomb, prepared for maize. Agersili, with the ground of the a. Mh'nd, is the only place of our mountain large enough for a regular rotation of barley, maize, and turnips to govern the agricultural life there.
[312] A séguia of about ten kilometers waters it. It comes from the high ledges of the Amerdul, common to the Idma and to the H'adduyws. Besides Agersili, this séguia runs between the grounds of Ad'erd'ur and of Wanchkrir. The first bourg, "the mute," rises
[361] in the steep valley of Ammern. The second, older, with a name now unintelligible, is not entirely Idma. The filtered water from Agersili falls there in cascades, into a ravine which ends by rejoining the main valley because of a capture. Two masses of highlands, the Tassila and Inraren Z'dinin, "the joined threshing-floors," tower over, at more than 2,000 meters, the two bourgs,

[Idma]

/47 cont./

133 for which they constitute the perimeter of dry cultivations. Same
101 characteristics: walls often steep, level summit. These high-
634 lands form a rejoinder to the tiny, uneven, vigorous sectors of the bottom of the valley. This contrast is, as has been seen, characteristic of the western Haut Atlas /High Atlas/.

133 If one passes beyond the ridge that dominates Agersili, the
361 Adrar Awselli, one falls vertically upon Usikis, the metropolis of
101 the Idma, the first that was founded by these conquerors from the
634 Sous. The site is rocky. Everything there is rough, unpleasant,
619 inhospitable. But what energy! A hundred tiers of cultivation descend toward the river. Over a whole section they belong to the Idma, from a little lower than Igersafen, first a. H'adduyws village, to Tamzgurt, where the Wanchkrir ravine flows. The Idma bourgs of Tasselli and Tannsmekht mark out this course. Tasselli is built on a rocky crescent, according to the archaic formula of valley habitat, called "l'éperon barré" /barred or pronged buttress or spur/. Traffic /48/ from upstream to downstream is difficult. Abrupts of 300 meters border the bed, which is at an altitude of 1,500 meters. That would be 100 meters of fall from Igersafen. At Tannsmekht, it will be no higher than
[312] 1,400 meters. Séguias on both sides of the stream collect the difference in level and spread the flow over the maximum area.
[241] But, in view of the drawing closer of the cliffs, the irrigated part of the two villages gives only about fifty hectares all told. That is little, on a section of some ten kilometers. Thus let us estimate at an average width of 25 meters the land available on each side of the river. This calculation, although it distorts reality, since there are long sections completely encased and, on the contrary, some relatively wide ledges, as at Tannsmekht or at Jjgit, gives an idea of the topographical limitations of this life.

On the right, affluent valleys rise up to the Hercynian bar of the Afuzar, which limits the Seksawa from the side of the upper Gedmiwa. The severity of these slopes, their yellowish bareness strike the eye. It is an absolutely desolate adret, undoubtedly because the high reliefs screen the W. winds from it. The peopling here is sparse: barely one village, Talmud'ât, and one zaouia, Assttif, which perhaps sought out a "desert."

[Ait Abdella]

/56 cont./

634 181 619 It is from this threshold that conquerors and explorers depart. Brives among others, who needed the safe-conduct of an amghar of Tuz'z'umt to be able to go up the valley. Everything here is milder, duller. The constructions do not scorn the pisé characteristic of the Haouz. In bourgeois fashion, one of them even rears walls plastered and limed: a unique exception in Seksawa. In any case it is in this canton that erosion has most profoundly marked the mores. For a very long time, it seems, its function has been the same one that we still discern for it: to penetrate and control the upstream for the benefit of the downstream. The alluvium of a history, which is not only that of the free taqbilt-s, but is amplified to the extent of names such as the one of the Mérinides, is still distinguished here. From the confluent of the asif n-a. Lh'sen up to Tagoyyamt, place of commercial passage and of dynastic conflicts, it is a succession of monumental ruins.

133 634 (241) From the a. Wagenna ("sons of the sky") downstream, the bed of the river spreads out. The bank, all in steep fallen rocks on the right, goes up by degrees on the left. Braving the freshets, risky crops cling to even the gravel and sand of the bottom. A very small epaulement on the left; and this is a floor of gardens: the "out-orchard" Berra n-rryat' of Tuz'z'umt, the "background" Luljt of Illutjan, the Talmerkht of Bulᶜwân. All of it periodically ravaged. From this section of the bed radiate the great séguias (312) /water conduits/ of the plain: Tagharro, Taâzzuzt, Tassebâit, Talh'archt. Two or three permanent springs gush up on the left of the talus, which support a second or a third tier of crops. These last planes are spacious and covered with trees in homogeneous masses: olive trees below, almond trees above. The slope of the river here is very gentle. Resurgences stagnate under the populations of laurels and tillirin, in what the habitués recognize as an "odor of paludism."

241 /57/ At Tuz'z'umt, the entresol of vegetation is spread out just as magnificently as the illiberal perspective of the country can have it: a veritable small plain covered with an old, but (312) luxuriant olive grove with intercalated crops. A double water

[Ait Abdella]

241 /57 cont./
312 system, coming either from Agawz or from the Talh'archt séguia,
irrigates the orchard by numerous ditches and runs several mills.
361 Like Bulᶜwân, Tuz'z'umt is a rich and large bourg, vulnerable
and cordial. The pisé predominates in its constructions. The
133 Tuz'z'umt basin is at the confluent of several ravines. The one,
634 closed off by the mound where a zaouia of Ahançal is perched,
opens toward the W. on the Urkus and the village of Tizi
Wargyun, which this elevated brow separates from Imintanout.
(137) The name of argyun, "the argan trees," doubtless indicates a
former extension of this species to places that it has abandoned
today, well to the E. of its present domain. The other torrent
is that of the a. Lh'sen, whose lower part, up to Agawz, remains
in the hands of the a. Âbdalla. The latter still hold a section of
the main valley, going back up in the direction of Z'init'.

It is, progressively, another world that begins there. An intermediary world, ravaged by the comings and goings of the powers and bearing all its uncertainty still legible in its land structures. Upstream from Tuz'z'umt, the entrance into the massif confines the bed, obstructed by samplings of multicolored pebbles, among them many hard stones and even rounded fragments of the beautiful grayish granite that is found in the region only at the Tichka. Between Imi n-tghli, "the outlet of the dew," and Talâint, the valley is encased between vertical quartzites. Their size increases up to the Awrir n-sidi Limam. They force on the river, unable to cut them, continual zigzags. Here, little by little, the atmosphere becomes that of the moun-
241 tains. The richness and the variety of the cultivated species recall the domain of the a. Lh'sen in certain respects, but with a less vigorous accent, less suggestive especially of coherent group-work. Magnificent vines cover the slopes at Tiburiin and Talâint, just as higher veritable woods of pomegranate trees enliven T'abya. Various crops of vegetables, notably eggplants and tomatoes, in gardens shaded by giant apricot trees. But visibly the bed, which is wide, has been left to itself. In time, all is carried away by high waters, unless the pebbles have been put to good use, as by the a. Lh'sen, to erect small bastions for crops.

[Ait Abdella]
[Ibubanen]

619 /66 cont./

Tuz'z'umt	Ih'ançalen, "marabouts" of Ah'ançal (Moyen Atlas). a. Lqaid, subgroup including: a. Lamghba, a. Bella u H'fid', a. bu Tefsut, a. Lh'sen u Ali, a. Bihi u H'fid, a. Chcheikh H'med, all having originated from the Sous like the a. Si Mh'and of Bulᶜwân. a. Wanz'id' (high a. Lh'sen, descendants of Sidi Musa). a. Buhadi (Iberhan, Demsira). a. Mançur (Dwiran). a. Burjal (Dwiran).
Agawz	a. Buâbila (same origin as the a. Lqaid). a. Lqçir (same origin as the a. Lqaid). a. Sâid u Mh'and (same origin as the a. Lqaid). a. Lihran (same origin as the a. Lqaid).
Tiburin, Imi n-tghli	Regraga "marabouts." Ih'naychen (Dwiran). a. Kawsir (Dwiran). a. Jâa (Dwiran). a. H'med (Dwiran). a. Moh'ammed (Dwiran). a. Si Brik Wakrim (Dwiran). a. u Nd'd'am (Dwiran).

619 /67/ Third Case
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[101] /In the original source the following five paragraphs are printed in small type./ The third case will be that of a disinherited aggregate, the Ibubanen, plur. of Abuban, fem.: Tabubant (in the Arab documents, form: al-Bubânî), occupants of
• [312] high declivities between the Amudder and the Ameznir. A country mutilated on all sides by its neighbors, without permanent
[142] streams, and almost without wells or springs. Their physical type
[181] from the very first contrasts with the unconstrained demeanor, the

[Ait Lh'sen]

/87 cont./

173 619 The guns of the guests, confidently put down at home, each had oil in the barrel. In the middle of the feast, the a. Lh'sen began to massacre the Demsira. The latter, taking refuge at the home of the son-in-law, were not able to use their guns, and the son-in-law helped to get rid of them completely, including his father-in-law. The group spirit was stronger than the nasab spirit for him: that is the meaning of the anecdote.

174 619 [613] [172] [312] From the Iwulla-Wanz'id' ensemble, the a. Lh'sen continue their expansion. First over the Demsira. There still exists a Demsira ikhs in the present a. Mh'nd, as well as traces of an old séguia that put this village in communication with Iwulla. Trace of an old solidarity. At what approximate epoch did the second leap of the conquest take place? We find an indication perhaps in the fact that the a. Lh'sen remaining in Iwulla had sidi Bubker u Sâid of the Mez'ud'a as patron, whereas those who emigrated into the low valley had as patron the grandson, sidi Ah'med u Âli. This time lag of two generations doubtlessly marks an echeloning in the constitution of the domain. That is to say, respectively, beginning and middle of the eighteenth century. That would roughly correspond to the indication that the first extension was made eleven generations ago. Let us take these approximations for what they are worth. One cannot claim more in the present state.

The second extension carries the a. Lh'sen to the highlands of Ibuban, which will then be retroceded by sale to the present occupants, unless they had thus been returned to the people found on the spot. Let us note, however, that the emigration of the a. Irz'z'i is better placed in the first hypothesis (beginning of the eighteenth century). This former population first occupied a village slightly above Ad'erd'ur of the Idma. First massacred /88/ by the people of Tasa (at Amerdul, people point out the site of a hecatomb, called Az'mu n-a. Irz'z'i), they were then driven from their habitat, overwhelmed by the precipitation of large rocks, which predisposed them to call it ominous, and obliged to take refuge in Ibuban. It is possible that they then asked for and

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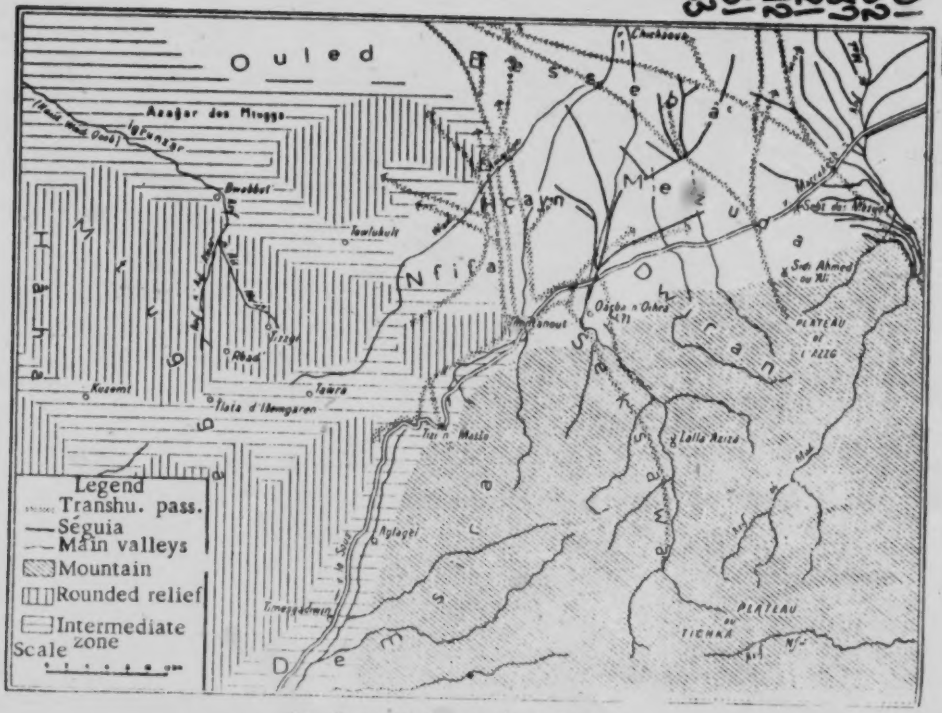

Fig. 6. -- Plain-mountain liaisons

/100/

1: Berque--138 Z-5 (ca.1950) 1955 MW11 Shluh MW11

/104 cont./

174 648 221 Other grounds could formerly have constituted the perimeter of tillage of the Seksawa. One knows the fragility of philological hypotheses. /105/ It is not on belief in the doublet of Seksawa-Chichaoua, if it is one, that we could ever base ourselves. But it is not very probable that at the time of the Seksawa expansion this powerful population did not project toward the plain the same spreadings, if I may venture to say it, of agricultural life as their more modest neighbors, like the Dwiran or Mez'ud'a, do today. The harsh history of the Chichaoua plain, its Makhzen /makhzan/ status, which took all spontaneity away from the movements of populations and even occasionally led to transfers en masse, like that of the Idaw Blal or the Ud Besseba^{C}, will prevent ever coming to a conclusion on that. But one is struck by the unity of the system of irrigation between downstream and upstream. [312] It is the water of the Seksawa that, conveyed by four séguias, carries an uncertain fertility into about all of the first third of the plain. Chichaoua and its valley have remained integrally Berbère /Berber/. Still today, numerous Mez'ud'a possess land there and make the plains habitat and the mountain habitat alternate. More to the E., in Frûga, the saint of the Seksawa enjoyed a water right up until a late date: a hagiological indication that is not without interest. Let us mention only for memory the transhumance, a phenomenon that goes beyond the landed-property right, but which after all is practiced in Ud Besseba^{C} for the profit of the Seksawa, unilaterally and without this one-way service being understood today. Finally, the abundance of the agadir-s in the toponymy of the a. Abdella, on the mountainous threshold that the river must cross in order to empty on the plain, agrees curiously with the existence and fairly recent activity of agadir-s that can be spotted on the same band of the Dir, in Dwiran and Mez'ud'a, where their function is clear.

174 221 121 All that is little for proof. But the ensemble of presumptions is sufficient to evoke a former state of things when the plain-mountain relation, in the case of the Seksawa, correlatively

/105 cont./
174 matched an affluence in piedmont lands (1).
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1. It is the sâh'a of the Seksawa, of which Ibn Khaldûn speaks. Cf. J. Berque, "Antiquités Seksawa," Hesp., 1953, p. 382.

When did this affluence disappear? The hypothesis that comes to mind, as one has seen, is that of the anti-Mérinide rebellion of the fourteenth century and of the construction of the fortress of al-Qâhira, intended precisely to block the montagnard chefferie by cutting it off -- and it was ever thus -- from its sâh'a, that is to say, from its clearances. As experts, the masters from Marrakech inflicted on the system a definitive breakdown. They abolished for it one of the terms of this seasonal plain-mountain alternation, of this South-North vibration, which formed the life of the times.

Solidarities for the Water

241 The great problem of montagnard horticulture is of a mechanical nature. It is to counteract the blind force of the slope and /106/ to draw life from it. How? A physicist would say: by a tangential diversion tending to the horizontal. From this abstract law can be taken two kinds of complementary techniques. The one of the soil, which breaks the declivity into tiers, often
241 dearly constituted. The other one of the streaming waters, which
● 312 exploits their spontaneous movement in order to spread it in a plane surface either by channels or by direct spreading. These hyraulics tend to substitute for an unutilizable flow, springing from the violence of unexpected water, a calculated module in order to saturate the land to its limit of absorption as much as possible. That is to say that it sets vast distances to work. First, those that the impluvium covers. Then those that the channel crosses to reach the point of utilization. Thus irrigation is a great consumer of space. If it inspires one of the most skillful, most coherent forms of the mountain life, the fact is that it requires the solution of the greatest difficulties of a political, technical, and social order.

/106 cont./

312 648 619 (634) (628) Political, because in this country of concentrated life, the séguia is sometimes intertribal, often intercantonal, and almost always intervillage. The intake of the séguias serving the Dwiran and the Ud Besseba^{c} is found in a. Abdella, at least for most of them. The relations with the Ud Besseba^{c}, an Arab tribe of turbulent character, were aleatory, and, long before the Protectorate, one is already at official regulation of them. "The users of the Wâdī'l-Qṯhra and the Ud Besseba^{c} being" -- said a dahir of 1285 Heg.: 1868 -- "found in disagreement, I order that one fifth be reserved for the Ud. Besseba^{c}, the rest being left to the former." On that point at least, the old order was dead: the prince had to intervene. Not far away, this was the case between Mez'ud'a and Gedmiwa. But not between Seksawa and Dwiran. Between these two groups, the relations for the water are governed even today, not only by fixed agreements, but by the "tours de faveur" /turns of favor/, discretionary in appearance, equal in fact on both sides. For the a. Musa depend on the good will of Taddert in Dwiran. The lower Dwiran depends, just for drinking, on that of the a. Abdella. The solidarity, therefore, is not that of the cantons, but of the tribes.

631 312 619

133 The current of the river dries up downstream from Z'init' during all the summer months. It reappears only in more and more intermittent fashion as one goes toward the plain. It is true that some small perennial sources murmur here and there on the banks, and that the bed itself lets waters spring up more or less continually, which attest to a subterranean circulation and even, on the side of Lekhneg, stagnate lazily under the laurels and the /107/ tillirin (1).

1. Inula viscosa.

312 But the width of the bed, its permeability, which vast banks of sand and gravel, ikrirs (a. Abdella), or ikri (middle Seksawa), indicate, no longer permit, from a certain date, a profitable, let us say, progress of the water. It is thus higher and higher upstream, as the dryness becomes accentuated, that plains irrigation will go to seek its blessing, and that by artificial conduits: the

/107 cont./

312 séguias contrived at mid-flank of the left bank will then have their full use. And not only the Talh'archt, whose intake, however, dominates Tuzzi'umt. It is indeed still higher, at Imi n-tghli, by way of the Targa n-berdun, that the people downstream are obliged to make the water pass. At Imi n-tghli, in fact, the utilizers observe -- a phenomenon doubtlessly related to the cessation of the primary soils -- a sudden loss, which no longer permits entrusting the waters to their natural bed. Thus it is only thanks to a series of works of art that, in the case of drought, far away in the Ud Bessebi[c] plain, the fellah of the Sa[c]idat or of the Ud Sawla can benefit from the rains falling on the distant Idma or in the more distant Taddert. And it happens only by making them cross, by the precious gift, the territory of several tribes. Veritable geographic concert! An organization of the space, of a space studded with rival centers, masters the difficulties caused by the long-term management of the waters. But that insofar as a certain atmosphere exists. Now, this is not always the case, even among contributors. The Idma of Taselli
312 depend for their séguia on the a. H'adduyws, who control its in-
578 take. Hence continuous conflicts. Even between Idma, the enormous séguia of the Amerdul, which the stream takes twelve hours to travel, has no longer been the object of any attack on the part of the people of Tasa since an agreement at the beginning of the eighteenth century. But its distribution still causes numerous conflicts between the villages of Usikis, Ad'erd'ur, and Wanchkrir. On the whole, however, the system has held.

624 The administration necessitates complicated and sometimes
312 extremely delicate surveillance. It is a functionary who performs it, the amazzal, plur. imazzalen, or "runner" (cf. ar. /Arabic/ jerrāy). The fulfillment of such a role requires initiative and integrity, but it especially requires that a collective order, made of unwritten laws, work. The personage who assumes it is in general subject to the unanimous designation of his fellow citizens and can stay, even though upheld by the temporal authority, only with their confidence. A very old order, with

624 /107 cont./
312 immediate sanctions, and calling for its /108/ own application, without discussion or appeal (1).

[191] 1. J. Costa, Colectivismo agrario in España /Agrarian collectivism in Spain/, 1915, pp. 541 sq., also observes that the famous Water Tribunal of Valencia, the Cort de la Seo, is a very amicable jurisdiction. Conflict could, at any moment, be removed to a judiciary instance, but that never happened!

is glimpsed here. It sanctions a certain number of what we shall
624 call principles. For example, the upstream-downstream direc-
312 tion is the direction that governs the continuity of the irrigation,
578 and can, in case of conflicts between groups, give rise to au-
628 thoritarian application by the power. Thus the old legal dispute between Gedmiwa and Mez'ud'a, for the séguias of the asif el-Mâl. Such a rule implies on the part of the upstream irrigator, whom it favors, some discretion, community honor, care not to harm the people below. That generally suffices among fellow
628 citizens. It is the primary step. Beyond that, there are agree-
312 ments between groups. Most often, they manifest very old bal-
578 ances and a statutory constancy. But occasionally also they are more circumstantial: subject to mercenary debate or also to ritual
[754] proceedings. A part of the water is bought, unless it is obtained by the "injunction" of the âr (2).

2. Cf. E. Westermarck, Ritual and belief in Morocco, 1926, t. I, pp. 518 sq.

[648] This is what happened in a. Musa for the use of the water from Aduz, in Ud Besseba[c] for obtaining supplementary portions from the séguias of the Seksawa or the Dwiran. This is what happens generally at the time of the floods: the unforeseeability of a windfall determines modes of distribution that amply go beyond any strict regularity.

/115 cont./

233 221 648 But although this problem is enclosed within very wide perspectives, perhaps certain historical features will confer a more personal physiognomy on it. It is a fact that today the irreversibility of the movement has no explanation in the eyes of the people of the plain, struck by its inconsistency. But who knows whether it does not find its counterpart in the irrigation? The (312) mountain tribes are masters over letting the water pass or not. A low-water custom and a high-water custom, applying different rates, govern the hydraulic and human relations, on both parts of the Dir. Perhaps also one might think that the ascent would not be favorable to the plains livestock, accustomed to a more /116/ clement temperature. Finally, the possibility of empty pasturage in the ample grain-lands of the plain exempts the tribes from below from going to search elsewhere. They consequently no longer desire the use of the high sectors and are not interested in it.

Nevertheless these explanations have left aside a fact more profound, although infinitely less clear: the solidarity between the mountain and the plain, point of departure of the present chapter. For what one finds here is a relation in a unique sense, singularly richer than the simple economic connection. Evidently, economic relations are largely outrun in the matter by other necessities, other habitudes, other feelings, other images. As proof, the political character of the relations that are established between tribes for the dispositon of sectors indispensable to their movements. The fact is known for the Moyen-Atlas /Middle Atlas/, where it has conditioned all the demographic evolution and the distribution of powers in the mountains or plateaus, from the Jebel ᶜAyachi to Fès and Meknès. But even in the zone that concerns us, recent incidences of these two orders of phenomenon one on top of the other have not been lacking.

578 /The following paragraph is in small type in the original source./ Although it may go beyond the chronological cadre, and only by title of example, let us note that the possession of the Tichka, disputed among Seksawa, a. Tkssit, Ijjanaten, Idaw Mçat't'ug, etc., failed, hardly later than 1930, to start a violent confliot.

241 /123 cont./
171 Semitic baetulus is glimpsed. It can be contrasted with the Latin God-Term.

241 The lower valley, at Bul^{c}wân and Tuz'z'umt, where intercalary crops are spread quite widely on two levels very well marked, almonds above, olives below, possesses several enclo-
[333] sures. The wall of dry stone, ad'erras, occurs frequently in the country, for all sorts of uses.

[[92] The most interesting names for the "enclosure" are agellay and urti, this latter word having multiple acceptations. But the form becomes rare as one penetrates into the middle valley. It is hardly in accord with cantonal egalitarianism. It implies larger facies than are offered upstream, and also a kind of life that is no longer that of the rich man of the mountain. It cannot be counted here as a type. Even in the lower sector, moreover, it squares with completely different conceptions: one will see it apropos the ground of Bul^{c}wân itself, which, however, constitutes the extreme concession of the Seksawa system to the matters of the Dir. There, as at Tuz'z'umt, one can move about for a long time under the almond or olive trees without seeing any discoverable limits in the topography, really marked out materially.

Second type: the crops of the thalweg sprouting up in the masses of small stones and claiming a precarious existence in the autumn floods. Very often, parallel bands are marked by ranks of blocks. Clearing away stones contributes to the establishment of boundaries and embankments. Sometimes with great difficulty. The least freshet puts everything in question again. Remarkable
[192] examples may be observed facing Bul^{c}wân itself. They bear an Arabic name, lulja: bottom crops, risky crops incessantly lost, and begging for nourishing moisture from the inundation that ravages them. In the higher valley, in a. Lh'sen for example, the system becomes more original. One finds, on one hand, the island of fortified blocks, reinforced by trees, and, on the other
[312] hand, the crop of long submersion. That is a matter of a form a bit special: agriculture of chance and exception, that of these akrium, where human effort indefatigably recommences its humble edifice before the menace, but also the benefit, of the

/123 cont./

241 water. Certainly the torrential descent will carry away the
• [312] pebbles, demolish the walls, bear off the seeds: but sometimes, too, it respects them. In any case, it wets the soil and deposits silt. A risk to run...

Third type: the dry agriculture, on high brows of hills or forest clearings. It is an important complement of the hydraulics. /124/ But we are too poorly informed on the altitude
243 pluviometry to analyze the conditions precisely. The grain-lands
423 always exceed the mark of 2,000 meters in the Tasila and the
613 Azuran. Rye and barley reach good yields there. That explains why the competition for the usufruct of these lands is lively. And why it is honorable. It is a competition between communes and between notables rather than between fellow citizens. The distance is a prize for the rich and for the bold. The only one of his ikhs, such and such an individual launches upon valorizations or
[621] clearings, which he will support, of course, with titles. Nevertheless the servitude of a community vocation remains keen enough to impose allotment in certain cases. If some of these grounds, like the Tasila, have been very much appropriated, others, like the Azuran of the Imt'ddan, suggest very closely the custom of distribution among ikhs-s. The vocation of each of these is still clearly affirmed, for example, in the albur of the a. M'hnd.

241 Elsewhere, and about wherever the forest domain rules, the
423 vivification by clearing or by removing stones will often be invoked as the source of right: the litigant has recourse in this case to the Arabic verb t'uww^{c}, and then a Mussulman principle, that of "vivification," in fact works for him. But to what extent is it an old institution? It is difficult to specify it. Perhaps one will find more authenticity and, at the least, originality in the customs governing certain plains of the Dir, on both sides of Imintanout. When the season arrives, a race to the tillage is organized. The first one who marks the furrow has the enjoyment of it for the year. In Seksawa, although it nowhere functions in the manner thus avowed, this practice is implied in everything that arises out of the notion of "communal" muchū^{c}.

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423 /126 cont./
Several experimental measurements give as an average:

Inheritance of the ikhs of the a. Watchaw (a. Musa)	30 m^2
-- si Abdallah u. H'ammo (Taselli)	45 -
Sheik Wakrim u Lh'ajj H'fid' (ibid.)	70 -
Chkku Family (Imt'ddan)	26 -
Ground of Agersili (Idma)	102 -
-- of Z'init' (id.)	200 -
-- of Tabratjut (a. Musa)	75 -

241 /127/ Such an exiguity, aggravated by the dispersion over areas occasionally exceeding a kilometer in length, creates a thousand technical difficulties. No less than irrigation, it imposes the meticulous work of the "hoe," agelzim. At any time of the year, they are but bent-over peasants, "interrogating the earth," to return to a magnificent classical expression, and rebordering the smallest ledge of the relief, the smallest angle of the periphery, in order to spread there the windfall of the water. Though the quadrangular form is common, the agriculture does not neglect the minor forms. Thus, the "peduncle" of humus, ad'ar. All the same, a "redan," tighmert, sometimes remains abandoned. But generally, except for the cases of rotation of soles /Fr. sole, in agriculture, the expanse of arable land intended for a certain crop in the annual rotation/, as at Agersili or the a. Mh'nd, the space cultivated in the channel is full, without fissure. That is the very characteristic that opposes it to the spaced spots of dry cultivation, visible on the hill from afar. These fields are of irregular form, while the irrigated parcels, aligned in balconies or compressed into a damp and almost juicy bottom, are fractioned only abstractly and according to a system of four orients, of an onomastic nature.

But this exiguous parcel is often a composite itself. Depending on its area, and whether or not it is level, it may be fractioned into "lobes," tisirit or tirit, themselves divided into
(312) "squares" of irrigation, uz'unen. Or else the emptying ditch will open directly onto one of the latter. This divisibility may also result from the exigencies of cultivation by water, or from

/133 cont./

221 of their snow. Generally, from the middle valley going upstream,
241 this is the time, the rivers visibly falling, when one begins to
[312] put water in the séguias. Up until then, each one served himself at his discretion, where the rain, or moisture owing to the long snow-cover, did not make all irrigation useless or detrimental. For the livestock breeder, it is the return from the plains
[233] transhumance. Continuation of the shearing and castrations in a. Abdella and a. Lh'sen.

Mayyu, "May": it is barely spring in the high cantons, where the cultivation of early barley starts about the 15th. The
[233] livestock breeder sells his wool and standing animals. He is suspicious of the morning pasturage, when the dew hides lghechch, "the spearwort." From the 1st to the 13th, it is "the Aldebaran," ddabaran, an important moment in the agricultural rhythms. One considers that after this time the fructification of the almond trees is definitive; this entails many consequences in the customs and the "judiciary year."

Nunyuh, "June," marks the beginnings of the maize harvest in a. Abdella. The cereal grower must have sheaved all of his harvest on the threshing floors. The 14th, which coincides with the celebration of lânçrt, closes the sowing of late maize.

Lulyuz, "July," sees nearly everywhere threshing, irrigation of the maize, cultivation of the turnip, carrots, and now potatoes. The gathering of almonds starts in Bas /Lower/ Seksawa.
[233] After the 10th, the livestock breeders of the high cantons reach the mountain pastures. They will remain there /134/ somehow or other until the hibernal descent, despite phases of stabling.

Ghucht, "August," month of winnowing. The maize is harvested in a. Abdella, a. Lh'sen, and a. Musa. It will not be done until October in the Haut /Upper/ Seksawa. The peasant busies himself with the irrigation of his turnips and his carrots. The olive trees fructify. But it is also, in general fashion, the
[574] season of the great gatherings, of the patronal feasts whose cycle embraces all of the western Dir.

[820] Month of closing: mayuh, nunyuh, lulyuz, wayyahu; ghucht,
[539] uhu, "May, June, July: keep going; but August: done." But it is

241 /142 cont./
Although one cannot /143/ calculate it, beyond doubt an enormous increase of density characterizes, in relation to the plains economy, that of the mountains.

A concentration of work and of life, the will marking everything, a deliberate agronomy, sharpening the ancestral practices by a reasoning capable of evaluating the action of factors and causes -- such aspects are frequent and decisive. But they are [184] not observed uniformly in all the cantons. If the hydraulics furnishes a criterion convenient for classifying these small societies, other factors compete there which are not found everywhere in the same degree. Their ideal union would make this montagnard 182 an economic being perfectly adapted to his milieu, who would 241 squeeze from it, by livestock breeding and tillage, the tree and the garden, every resource possible. But there is nothing of that. Adaptation of the group to its natural milieu, realization of equilibria, employing an economy propitious to a great history, which other aptitudes of these societies would postulate: all that has remained at a low, precarious level, or rather has consolidated in the regression. Why?

Creation of Soils, Collection of Water

242 The basic work in the mountains is the preservation and even
● 312 the creation of soils. It is mixed with another essential task, that
128 of the regularization of the water. Let us therefore examine simultaneously these two activities, which the native agronomy does not distinguish.

171 In a completely different milieu, that of the pre-Saharan plateaus, a peristyle bordering on the S. this Mediterranean world that Romania energetically made advance into Africa, such techniques have been remarkably described (1).

1. J. Baradez, Fossatum Africae, 1949, pp. 174 sq.

/144 cont./

133 those that spurt resurgences in the bed itself, supply a vital contribution, despite their perceptible decline in summer. For example, the so-called source of Sidi Mh'and in the bed of the Seksawa downstream from T'abya. The essential nevertheless [312] lies in the collection of the wild waters, both by the mass of life that it bestows, and by the correlative interest that the native techniques bring to it (2).

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[114]

2. E.-F. Gautier has devoted a magnificent chapter to the surface circulation of the waters in Le Sahara /The Sahara/, 1928, pp. 71 sq. But it was the privilege of J. Despois to emphasize the importance of this irrigation by accidental waters, completely neglected by J. Brunhes, and which plays the main role in North Africa. J. Despois, La Tunisie orientale, Sahel et Basse Steppe /Eastern Tunisia, Sahel and Low Steppe/, 1940, pp. 292 sq.; communication to the Congrès de Géographie de Lisbonne, 1949, on "L'utilisation des eaux de crue dans les pays arides de l'Afrique du Nord /The use of flood waters in the arid countries of North Africa/." Example of the plains of the Houdna, Actes du Congrès, 1951, t. III, pp. 245 sq., and Le Houdna, 1953, pp. 166 sq.

133 The proportion between these two orders of contributions is
312 difficult to estimate. The local view distinguishes them poorly. For it, everything is a matter of "ravines," ighezraten, plur. of ighzer. It appreciates the value of the sources, which a saint legend often magnifies. But, curiously, it does not relate them to the birth of the rivers. That is why it is impossible to state precisely where the Seksawa came from. An idle question on the plane of objectivity. An instructive incertitude if one is in the least interested in grasping the native interpretation in order to
312 draw from it all that it might furnish /145/ in clues. What

/145 cont./

312 counts the most is the irrigation based on accidental water. Its role becomes vital near the end of summer, even in the time of winter, if it is the least dry1 as was the case in 1952. But this flow carried by the ravines would be lost in muddy and devastating tidal waves without the action of man. Thus the job is going to consist of spreading the flood both in space, whence a gain in area, and in time, whence a decrease of the debit and better possibilities for absorption.

This work is permanent or seasonal, or even only episodic. The torrents are never perennial, except in their highest sections: thus from the Seksawa up to Z'init'. If a storm, rrâda, arrives unexpectedly. It fills the innumerable mountain ravines with water. This is the freshet. It has been long awaited. A diversion has been made at a favorable point of the bed. All the grooves, all the planes of the earth, natural or artificial, cooperate in the same task. A consummate science of the slopes and levels is shown. It cuts the ground into sheltered beds /Fr. ados/, into cells, in order to guide the water, to utilize its least drops. To this peculiarly montagnard specialty, the piedmont opposes its own, that of the "epandages" /"spreadings"/ of the freshet, lfid', and more rarely engi, plur. angyun, and that of the organization of the impluvium, lmejbed, iriq. The major form is nevertheless that of the "channel," targa, plur. tir^{w}ggin, rising from a "retenue" /reservoir, river water between sluices/, uggug, laid out in the bed of a river, or, more rarely, from a "basin," chcharij or afraw, where a source trickles. Moreover, the role of the basin is complex: accumulator, it is also divider, just as the channel is divided into submultiples, down to the tiny depression made between two beds, and thus combines adduction and distribution.

The mountains are familiar with a certain number of other types. There is not, truthfully speaking, any flow ditch that crosses a slope in order to drain the waters of a downpour. The abruptness of the precipitation in the mountains, the declivity of the slopes would then cause havoc that would make the conduit unutilizable.

/145 cont./

• 312 Where there is no trace of a permanent bed, where the toponymy no longer mentions, were it as hyperbole, either asif or lwad, the least sloped "ravine," ighzer, "pond," tamd'a, or "hollow," talat, of any kind serves for the arrangement from a water hole to the confluence of the lines of slope. Thus in Ibuban. Finally, the catchment of what we would call resurgences is sometimes effected in the bed itself. One digs a well, which subterranean galleries fill up, or one builds a wall, which by its foundations reaches the subterranean pool of water: this is what the a. Abdella call ah'riq, plur. ih'riqen.

/146/ The native view does not see any difference between these methods, except one of degree. For it, it is not a matter of distinguishing, as we do, between these resources according to their origin: permanent course, or subterranean, accidental flow, source, accumulation, resurgence. What counts is the question of the soils and of the planes that concentrate in a more or less abundant or precarious fashion the waters coming from one knows not where, but always, more or less directly, from the sky. This homogeneity of origin is duplicated in practice by a homogeneity of utilization. For the fellah there is only a difference in intensity, or rather in rhythm, between permanent and accidental irrigation. The question of the soils and of the planes, of prime importance upstream from the basin, becomes so again downstream. The basin of reception and the basin of spreading are symmetrical. They are distinguished from each other only in that the second one, where the work of man predominates, is infinitely more concentrated. This feature is not negligible in an economy where the initiative of the group adheres narrowly to the natural cadre. The rural technique, correlative of the social structure, is adapted down to the details to the space where the group lives. And at the same time it fashions it.

One measures from there at what point the collection of water and the creation of the soils are but one. The treatment of the mechanical problem of the slope automatically entails trying to spread the flow over the largest planes possible: natural ones, if it can be done; but also artificial ones. If the slope is

/146 cont./

312 too steep, almost vertical, it is notched with stairs and benches. Networks of arable surface will then stretch in curves of levels, superimposed on one another by little walls of dry stone or talus: imaran, plur. of imiri, in the first case, igenzwan or igenzaten, plur. of agenza, in the second. That is a common form. The fullest application of it that can be cited here is that of Agersili. It is not rare that more than a hundred steps, as, for example, at Asikis, build a staircase for giants up to mid-slope. At the same time this system resolves what our engineers call the problem of colature. But it is resolved poorly. Although the excess moisture descends from tier to tier or accumulates in the drains that the stone walls constitute, and, in addition, undergoes an intense evaporation, the washing of the land is inevitable. Thus the yield is relatively small, despite the water and the fertilizer.

So, therefore, a struggle against the swiftness of the flood, itself resulting from the slope; therefore, the arrangement of the slope into graduated level-stretches as broadly as possible. Struggle both against the meteoric fatalities and against the penury of arable soil: the two things are conjugated. /147/ And since, in the most frequent case, it is a matter of, not permanent, but sudden and violent resources, all of this work requires, in addition to a permanent water-strategy, tactics whose sagacity is astonishing.

312 114 Such is the peculiar nature of the montagnard hydraulics. It depends almost entirely on this technique of "unforeseen" waters to which J. Despois has rightly drawn attention. To what extent then is it necessary to distinguish an irrigation of diversion and an irrigation of accumulation, like J. Dresch (1)?

1. J. Dresch, Documents sur les genres de vie de montagne dans le massif central du Grand Atlas /Documents on the kinds of mountain life in the central massif of the Great Atlas/, 1941, pp. 12 sq., a work whose remarkable cartography and all the more the commentaries have constituted for our own research a geographical cadre

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/147 cont./

/footnote 1 continued/ and a useful means of cross-checking. In the same order of ideas, let us cite, by the same author, in collaboration with J. de Lepinay, the guide on Le massif du Toubkal, 1938, pp. 55 sq.

Certainly, accumulation of the waters represents an idea that is never absent. Even on an intermittent course the slight obstacle constituted by the uggug starts to create a small reservoir. Moreover this reservoir takes on form and function: humble "water hole," afraw, or veritable "basin," chcharij. But the difference lies less in the reception of the arriving water than in its distribution. Whether the water comes in a state of continuous flow, or intermittent, or in the form of resurgence, or of concentration of the streaming down a slope, the problem is finally and always only a problem of collection. At the exit, however, a radical difference sets the continuous debit -- obviously conceivable when the reception is so itself -- in opposition to the discontinuous debit, which periodically empties the reservoir. In the first case, the role of the latter is only to raise the plane of water, while in the second this role is duplicated by another: that of concentrating the temporary resources with a view to a massive, though rapid utilization. A question of level in the first case. In the second, a question of debit. Accumulator in one case, distributor in the other, the basin is both one and the other. The distinction between the two operations would thus be subtle, if all the emphasis did not bear on the second in the local view. Extremely expert at gathering on the surface of the ground the complement of water that the rain withholds, the native method reveals infinitely more competence and obstinacy in assuring the distribution of it. It displays on this occasion marvels of industry and tricks. One feels that it contrives to split hairs, to subtilize if necessary, in order to transform the irregular windfall of water into debits for infinitesmal allotments. It tries to make social equity with the natural hazards.

312 /148/ A hundred séguias represent, for the Seksawa, a realization of considerable volume, although they might be only very rarely walled up. The Talh'archt of the a. Abdella crosses several aqueducts, one of which is eight meters high. It is so wide that each year, at the time of cleansing, the old amghar Ah'med u Lah'sen made a bundle of thorns float in it, from the intake to the ending, without its catching anywhere. The thing has remained proverbial. Sometimes, along a schistose wall, the conduit is conveyed overhanging, passes through tunnels under rock. Even the saints are used there. But neither the intake, a simple weir of dry stone, nor the line, which winds capriciously, for the current is left to do as it pleases, neither the crossing of the hollows, often reduced to a simple "gutter" of wood, iqend'ert, nor the basin of distribution, chcharij, which is frequently reduced to an uncemented hole, afraw -- none of all that is durable. An infiltration aided by the axial impact of the water on concave walls, the absorption by plants insufficiently cut down, finally numerous losses in a system in which the sluices are made and unmade by pickax, with a little mud: so many incessant deficiencies, the adding up of which soon makes the water dry up. Also
312 the abandoned séguias are numerous, notably in Moyen /Middle/
172 Seksawa, in the cursed sector which the a. Gasa formerly inhabited. One can follow at long intervals, as though fossilized on the slope, their network forever fruitless. The decadence of the fields, the petrification, if one may venture to say it, of all the countryside sanction neglect. There is nothing more melancholy. The native avoids reviving places that, according to him, are demoniac. He does not persist in repair. He gives up the place.

312 Thus the fragility of this whole agricultural infrastructure is great. It holds together only at the price of constant care. It is necessary to repair every instant what has not been built to endure and what it is nevertheless necessary to make endure. Veritable sieve of the Danaïdes, where the work of generations has been lost! Nothing is more proper to confer on this humanity at the same time as the idea of effort, that of its precariousness. An act of constant will is necessary to any survival. But this will is often wasted wrongfully, in the futility of perpetual repair.

/148 cont./

823 Same imperfection in the procedures of catchment. The
[192] vocabulary, so rich in the matter of plants, reflects this mediocrity. Most often the soil, akal, is designated only by the color. Barely a few denominations such as itqqi, "clay," rrmel, "sand," afur or afza, "limestone." What is more grave in practice is that the idea of the permeability or impermeability /149/ of the rocks is neither conceived of nor put to use. Hardly ever is it noted that a certain soil, called aqeryan, used as revetment of a basin, no longer "drinks" the water after a day or two. On the contrary, the reddish soil, called amachcho (1),

1. Such would thus be the origin of the appellation Tizi Umachcho, related to the characteristic hue of the Permo-Trias.

823 "cat soil," is always very thirsty. Therefore, not only does one
312 not build with concrete, unless it is a matter of integral construction of stone and limestone, but the digging of wells and the search for deep water follow only irrational routines and, what is worse, from an empiricism itself unskilled. Each well-sinker has his procedures in order to detect if he has reached "the head of the water": succession from powdery gravel to sand, appearance of "roots" of water on the walls if one continues to dig, increasing heat, extinction of a match flame with intense production of
[825] smoke, etc. The belief is that the water is held back by a slab, under which is found the habitat of snakes, themselves responsible for the heat.

312 At the bottom of the hazardous well, on the flank of the privileged rock, the streamlet of water wells up where and as it wishes. No notion of levels that the profile of the ditch must obey. The staking is done by gropings, with verification by the spontaneous progress of the water -- whence the strict caprice of
312 the first line. Finally one has recourse to the outsider. The
648 consciousness of this mediocrity is such that, for any delicate work, one appeals, at great expense, to the artisans of Marrakech, whose corporate body is recruited from the other side of the Atlas,

/149 cont./

312 [648] in the Todgha and the oases. In the matter of hydraulics, as perhaps for certain architectural forms, the Haouz and the Sous are tributaries of the h'arrat'in /Haratin/. Obviously, the ingenuity of the montagnards is concentrated on the adduction and the distribution rather than on the creation of the water. I well know [171] that this "creation" poses difficult problems, where European agronomy and its "rural genius" have lost in the art of empirical utilization and above all of collective organization what they gained in the domain of the kilowatt. The present analysis, being interested in gauging as far as possible to their exact level the different parts of an economic system, must emphasize successes and imperfections in it. The native hydraulics of the mountains, like that of the piedmont, is more an art of planes and surfaces than of the depths that the men of the oases readily reach.

/150/ Use of the Water

Here we are at the stage where the water, whatever its origin may be, is concentrated in the reservoir in order to distribute it to a given point. It leaves by a channel, which serves one or several "quarters," tamazirt /Fig. 7 appears here/ or tighmert, each being connected to it by its particular "intake," açder or ighin. The latter feeds a supply ditch, which, by secondary intakes, feeds other ditches. These ditches are called "for distribution" or "discharging," depending on whether they open, directly or not, on the planches to be irrigated. These are the asaru, plur. isura. In fact, a whole liquid arborescence ramifies out from the big channel, connected to a reservoir, down to the last grooves. There, /151/ "ados" /sheltered beds/, abadu, plur. ibuda, finally determine the little quadrilateral of level, irrigable by submersion, the "planche," uz'un.

Naturally, the distribution of water among rightful claimants calls for an endless fractioning. It almost always works according [804] to a rhythm in time. The cycle is of variable fullness according to the groups: week, ten or fifteen days. Thus it includes a certain number of basic units often called tiferday (sing. taferdit),

[TEXT CONTINUED ON PAGE 211]

/From p. 150 of the original source./

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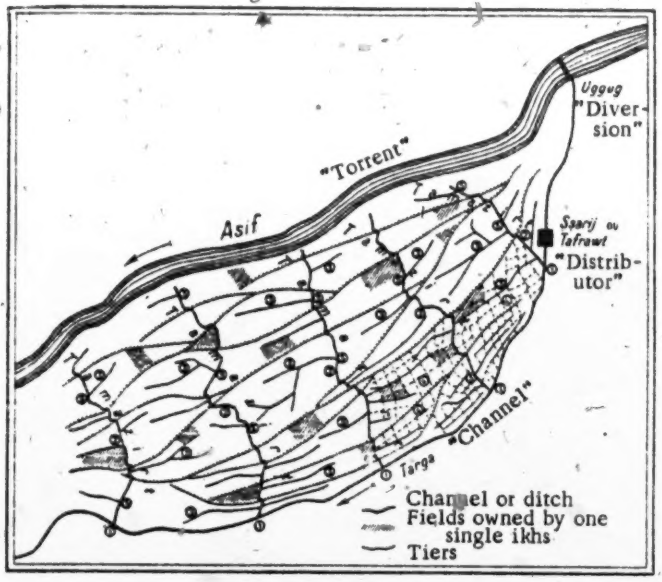

Fig. 7. -- Schema of the irrigation of a valley ground.

The "channel," targa, leaves from the ccarij, or chcharij, "distributor." It is divided into "distribution ditches," asaru, 2, plur. isura, which leave from "principal intakes," açder, plur. içdar or içdran, or further ighin, plur. ighaniwin, 1. On these ditches function small earthen sluices, taghamut, 5, plur. tighuma, opening on the "discharging ditches," isura, 3. Irrigation planches, tisirit, tisaratin, are themselves divided into a last agrarian subdivision, the "irrigation square," uzun, plur. uzunen, 4.

/151 cont./

312 804 "the entire day" or "the half day," distributed in "parts," tawala, plur. tiwaliwin. For each tawala there is a multitude of rightful claimants, each of whom only benefits from a fraction or subfraction. The estimation of it is done sometimes with the aid of instruments such as a kind of clepsydra, called tat't'act, or further by gauging in the reservoir.

But how does this water, distributed in so sagacious a fashion, act once it has come to the echelon of utilization? There again, an abrupt lag in the technique. At the end one finds no more than the procedure of submersion, its letters of African authen- [171] ticity are moreover immemorial, since it is the same method that the peasants of the Nile practiced until a recent epoch (1).

1. J. Brunhes, L'irrigation dans la péninsule ibérique et dans l'Afrique du Nord /Irrigation in the Iberian Peninsula and in North Africa/, 1903, p. 210, citing various works. See especially Descriptions de l'Egypte, 1824, t. XVII, pp. 10 sq., and the recent book by Muh'ammad Fahîm, Uçûl az-zirâ^{c}a, al-Qâhira, 1952, pp. 37 sq. The manual of Rivière and Lecq, Traité pratique d'agriculture pour le N. d'Afrique /Practical treatise on agriculture for North Africa/, 1928, t. I, p. 185 sq., comments on the harmful effects of poorly managed irrigation, the exact modules needed by each crop (p. 193).

312 241 The long saturation of the soil and of the plant by water is judged here to be the only efficient method. Preliminary to the tillage one practices a first inundation: this is the adunkal. Then a second one, intended to "break up the clods": this is the tirz'i wut't'ib. Then others "for soaking," isswi. Near the plain, the [184] a. Abdella practice three of them for barley, which conforms to [243] the data of our experimental agronomy of the South. But higher, the a. Ih'sen and especially the Idma multiply them as often as possible: up to 10 or even 12 times. Perhaps because the

/151 cont./

312 241 fractioning of the module is pushed farther among them, a matter difficult to verify outside of a specialized investigation. But more probably because of a belief in the virtues of the water. The faith in this panacea, acquired with difficulty, wonderfully distributed, is so ardent that in widespread beds, as in a. Lh'sen or Sekrat, on a ground of pebbles and gravel, a sort of forcing-house of plants under permanent inundation is customary: that applies to edible flax, to meadows /152/ for mowing, and sometimes to barley (1).

1. Already observed by E. Doutté in Gund'afa, En tribu /In the tribe/, 1914, pp. 102 sq. Cf. also J. Dresch, op. laud., on the Toubkal, p. 59.

[243] Veritable cereal-cultivation in the manner of rice. The procedure is called tanuri. But an excess of water entails many unfortunate consequences, for the soil that it breaks up and for the plant that it etiolates. It is true that with the perspective of scarcity, felt even in these mountains, and which explains to a certain extent why every watering should be feast and revel, and delights in excess, a competitive economy incites each assign to dispose, to the depth and to the end, of his portion when it falls to him. It is drunkenness following thirst.

312 Such irrigation, sometimes wasteful, sometimes insufficient, imposes harassing tactics because of its uncertainty. It also contributes to forging the energy of these societies. But, bereft of deep installations, tied to the risks of a storm, accidental in its matter, it remains a technique of expedients. Its risky nature, which an excess of distribution is not able to palliate, but only aggravates, limits its creative value. It is inspired by a magnificent social equity. But it relies more on guile than basic treatments. It makes satiety and privation alternate. It reduces the yield of its very assets and demoralizes a gigantic expenditure of collective will and efficiency.

To this precariousness, now triumphant and satiated in times of abundance, now suffering in times of drought, a fatal blow can

/152 cont./

312 be delivered by penury or by the affluence of lands. The first dries up the ditches, effaces the tiers, leaves only relics in place: ruins inhabited by demons, black and contorted trunks of former plantings, thus in the former domain of the a. Gasa. But affluence inflicts the same disasters (2).

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241

2. When we are better equipped to investigate the subjective notions that flow from these features of the economy, one will perhaps be led to analyze the particular idea that this society has of the "measure" /see p. 22/: it is the life of the horticulturalist on tiers when he escapes the inconveniences as well as the gains of oppression. Another important notion in this order of ideas: the publicity of the field, exposed to the eyes of the commune, but which must not excite envy or the "evil eye." Whence, in certain respects, the disposition of the ground.

241 That is the way that the acquisition of arable lands in the plain,
178 an infinitely more profitable formula, and perhaps also responding to a montagnard atavism, has noticeably had effects on the slopes that surround Z'init'. This decadence responded, at the same time as to the opening of new possibilities in the plain, to that of the place of asylum, where formerly numerous refugee families had to brave an indefinite siege. Everywhere, today, the benches have fallen away on the walls. The notches that were formerly seen very high on the flanks /153/ of the Tamjlocht and of the Mzawt barely pick up the vertical noon shadow.

The historical factor, the psychological factor clearly stand out from this privileged example. But other causes, less tied to the event, are also at work. The deforestation, for example, the ruining of the soil. A striking contrast between the principal valley and those of Taddert and of the a. Lh'sen, which encase it on the W. and on the E. For reasons difficult to discern, the compost of the slopes here have resisted better than there. It remains

/153 cont./

241 178 covered with small bushy growth and fodder plants that have disappeared elsewhere. The land has remained richer and does not affect from afar the glossy polish that shows among the trees of the Mzawt. The decadence of the soils and the ruin of the hig fields are obvious in the principal valley. Upstream from Lalla Aziza, a cemetery of almond trees. Downstream, notably near Imt'ddan, visible abandonment of the fields in balconies, which climbed two-thirds of the way to the crest, and the plaques of albur on the elevated brows. A color of the soil, a different vegetation, characteristic "screens" still mark these places. One reads there the effects of a former deforestation, which doubtlessly had a definite cause. There doubtlessly was an accumulated play of natural and human factors to ruin this historic axis of the Seksawa. But beyond individual causes, there is a permanent one for it: the vulnerability of the system. Neither benches, barriers of pebbles and branches, nor ditches of earth withstand a moment of weakness or forgetfulness. The loss of the high pastures soon entails, by the rarefaction of the livestock, thus of fertilizer, the sterility of the soil. Internal discords immediately engender drought through the abandonment of the ditches. This system, skillful but posed rather than anchored on the soil of the ancestors, then submits to the ransom for its precariousness: it dies without even leaving great traces. This horticulture exists only as an exception. Lodged in an eternal cadre that makes one see permanence where there is only ingenuity, it is slave at the same time as ruler of man.

A Distributor Genius

312 Collection; irrigation: between the two, a phase of purely social emphasis, that of the distribution. And all the more essential because the milieu reveals on this occasion a dazzling, an exorbitant virtuosity. One distinguishes at least three styles.

312 613 423 The first method, the one most bound to the montagnard closeness, is that of the gentilitial distribution. Disregarding the losses by infiltration, escape, evaporation, it leads the water to all the fields /154/ of one ikhs, even if they are far from one another. And as a general rule they are. It thus passes over the

/154 cont./

312 613 423 vast intermediate areas that separate them. It is discontinuous in space. It makes the turn of each of the ikhs-s alternate in time and makes it come again according to a periodicity peculiar to each group. This rhythm is naturally a function of the abundance of the debit expected, of the number of the ikhs, and of local preferences for such and such a series.

/The following listing is in small type in the original source./ 1st. The last village downstream to apply this system is Tuz'z'umt. At Tuz'z'umt, in fact, and for that of at least two séguias peculiar to it (the Targa n-Z'alt, from Agawz), the distribution operates in 12 turns of one day each (from ᶜaçr to ᶜaçr), allotted among the ikhs-s. The other séguia, the gigantic Talh'archt, common to all the a. Abdella, obeys other principles. But from Tuz'z'umt upstream, the gentilitial distribution prevails.

And here are some striking examples, borrowed from the Haut Seksawa.

2nd. In Iguntar there are 9 séguias. That is to say, from upstream to downstream:

t. n-yattuyn, t. n-bu teghradin, t. uzeddar, t. n-ddutgumma, t. ugerd ugadir, t. n-a. Mh'nd u Mh'nd, t. n-tghula, t. u-wrti n-H'chmad, t. n-tawart.

[525] [634] The irrigation turn is decided by "drawing lots," s-tekch-chut't', in the presence of the whole jemâa, among the members representing each of the ikhs-s. This drawing takes place each year. The length of the turns is proportional to a surface evaluated in lengths of reeds, and whose computation is periodically readjusted. An old document -- such at least is its appearance and the inference that its content authorizes, for it is not dated -- mentions probably the last of these computations. The merry-making that followed cost about 50 reals advanced by notables. The division, which still prevails at present, of the water roster into 12 days, accruing unequally to each of the ikhs-s, is fixed very precisely in the document.

But the properties of each of the benefiting ikhs-s are entangled with those of the others. No correspondence between the topography and the rhythm of distribution.

/154 cont./

312 613 423 In fact: except for the a. Naçr, who have their lands grouped in the immediate surroundings of the village of Tagenza, the 4 other ikhs-s are all represented in each of the quarters, but it seems without any definite part where the "parcels" under their jurisdictions are grouped. The entanglement seems to be greater and greater from upstream to downstream. In all the "quarters," except for what concerns the a. Naçr, only two do not group the integrality of the ikhs-s: Tamayust and Talfint u-wdi. All the others contain a whole sampling of ikhs-s.

3rd. At Fensu there are 10 séguias. Some come from the high valley of the asif Uziwal, others from the direction of Tasa. This abundance of water makes the portion a day and a night. Eleven turns, including that of the mosque. These turns fall to the ikhs-s, which divide /155/ the water among the foyers in proportion to the surfaces. At the top echelon, which is that of the distribution of turns among ikhs-s, the topography does not count for anything, each ikhs irrigating in turn its lands scattered over several quarters.

4th. At Tasa, three séguias and two orders of distribution. The one bears on the Imengad' and Anngar séguias, the other on the Ti-n-wammam. Here are each of these two orders:

1) a. Ggahi, a. Badis, a. Mh'nd u Mençur, a. Khald, a. H'ddan, a. Skurin, a. Yah'ya, a. Ch'fib, Izzuhra, a. Mazuz. Plus a turn called ass i-ymengad', privilege, moreover transferred, of the one that regulates the source.

2) a. Badis, a. Mazuz, a. Sfid, a. Lh'sen, a. Chfib, a. Izzuhra, a. Berka. Plus Aternaggo (individual privilege).

The irrigation rotates by ikhs-s, but within them it is adjusted according to surfaces and gives way when necessary to a drawing by lot, according to the general procedure.

A second method is called taghamut s-tghamut, "sluice by sluice." Without concern for appurtenance to the ikhs, it irrigates by large pieces that are continuous and contiguous to such and such a sluice. The order observed among them is from upstream to downstream. It is a form of decadence, of rupture. It may be due to either a particular abundance of water, rendering useless

/155 cont./

312 423 [613] the rotation by ikhs-s (explanation given at Lalla Aziza, where this method has functioned for several years), or to an excess of litigations and privative claims, or even to the gigantism of the system.

/The following four paragraphs are in small type in the original source./ [627] The second motive operated in 1949 in the village of Ad'erd'ur, which, in order to cut short a threatening dispute, distributed the water of the Tzemzgart. For the whole ensemble of the network of the Amerdul, a claim of this sort: it has not yet won. The order of the ancestors still holds good here.

The third motive results from the case of the a. Lh'sen. These conquerors of one of the affluents of the middle valley have preserved a vitality which, by a nice correspondence, is also connected to the relative conservation of their soil, to the consistency of the timbering on the sides, and to the abundance of water. They have 14 séguias, beyond the one that Wanz'id', the highest of their villages, draws from a source peculiar to it. Despite the lengthwise stretch of this whole system, the basis for the [613] distribution is not topographical. Being a matter of an important grouping, the ikhs-s here are grouped into two subgroups, ait Mençur and ait Ddaud, each of the two having each year, alternating with the other one, the privilege of starting. Within the two subgroups, it is the "sluice by sluice" system that functions. The lands of each of the two are entangled the whole length of the valley, from Buteghradin up to Tabratjut, to the confines of the a. Abdella. But this gentilitial system works only on the first four days of the week (starting from Sunday, a day reputed to be favorable in /156/ this taqbilt). The rest of the week, definite portions of the valley receive water: three of them are distinguished. Finally, the distant Tabratjut possesses, with other villages upstream, a special séguia, departing from the place called Ukhriben.

In sum, here there is a combination of the gentilitial system and of the system based on the continuity of several great soles /Fr. sole, in agriculture: expanse of arable land intended for a certain crop in the annual rotation/. The irrigation calendar, which one has tried to represent below, will give an idea of the complexity and at the same time the harmony of the system.

/156 cont./

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Beneficiary of the turn for irrigation	Day of the week						
	S.	M.	T.	W.	T.	F.	S.
1) ait Ddaud.	For the morning	Up to the âçr					
2) ait Mençur.		From the âçr	All day				
N.B. There is an annual rotation between these two subgroups.							
3) Section of the valley between Bukhemsin and Zzit u Bachtut.				From the âçr	All day	Up to the morning	
4) Section of the valley between Amelwan and Urti n-Sâïd below.						All day	
5) Lands served by the Targa Wukhriben.							All day
6) Lands served by the Targa Wukhriben. Tabratjut. Awinas, Agadir.	x	x	x	x	x	x	x

/156 cont./

312 423 624 A third method subordinates the irrigation to the evaluation of the amazzal, who judges in a discretionary manner the need that the crops feel for it. In a society of so contentious a spirit, one is surprised that such a method is possible and does not unleash inextinguishable litigations. There is none of that: there one is on a plane of rural order, prejuridical in a way.

/157/ /The rest of this section is in small type in the original source./ [178] It is according to this third procedure that the Talh'archt séguia, of the a. Abdella, was traditionally administered until an administrative reorganization intervened only a few years ago. [173] The amazzal was chosen in the old family of the a. L'anayt of Ilutjan, whose members still today occupy, on the knoll of Tigudar Ijjawn, facing the n-Lmakhzen agadir, places that tradition always connects with a "Caid 'Abdallah Sseksiwi" doubtless the king of the fourteenth century. These legendary persistences give an idea of the foundations of such a rural order and what forms its solidity.

[178] Indeed, the organization observed in a. Abdella is undoubtedly not a form of decadence. But rather, just as in a. Lh'sen, a form of amplification. These two taqbilt-s have surpassed the cantonal echelon. Consequently another rhythm governs them.

The Order of Irrigation As Document

312 423 178 [613] Moreover, where there is decadence, all the signs do not occur simultaneously any more than they affect in equal fashion the different orders of phenomena. In a. Abdella, despite the mobility of the landed life, the disaggregation of the milieu, and the absence of a water roster, a certain distribution of the ground among ikhs-s is still decipherable. As a general rule, however, the gentilitial rhythm of irrigation still exists, when the play of factors of change has distorted the order of the patrimonies. Nearly everywhere the turn for water reveals an old order.

This discordance between the evolution of landed property and the unchangeable cadre of the hydraulics, itself linked to the

/157 cont./

312 423 178 structure of the milieu, and to a certain scansion of the times, is of keen documentary interest. It perhaps reveals a former stage of this montagnard culture and permits discovering, beneath the individual variety that female inheritances and mutations have amassed, triumphing over many obstacles, the authentic rudiments. Secondly, it acts in itself as a conservative brake. The water is by no means "attached to the land," as our books claim. But the land and the water, correlatively, are attached to the group. One who sells or lets alienates a part of the collective personality, which is serious. In addition, the evasion of the right for water out of the turn of the ikhs, the intrusion of a third party in the roll of "sons of the uncle" cause a perturbation that the collective organism will try to eliminate. In fact, these mechanisms imply delicate connections between all the elements of an agrarian order. If one of them happens to be missing? It is a cause of conflict and failure in these operations of great style that the maintenance of the ditches, the repair of the sluices, the pulsation of the precious fluid according to an impeccable /158/ time switch constitute. Any lag between the gentilitial appurtenance and the tenure of the soil thus arouses reactions that tend toward the eviction, peaceful or not, of the foreign body. Firm or resolutory sales, inheritance by the women meet the opposition of new conservative mechanisms. In this sense one can say that the system of water distribution is a veritable legitimacy machine.

When the forces of mutation sweep it away, whether by their own action or by the decadence of the community or simply its technical resignation before too much complexity, the old mold shatters. The turns for water will henceforth be based on something else: the estimation of experts or topographical continuity. At the end of this evolution, the portion of water, attached to a certain landed property, would flit from hand to hand according to (425) the uncertainties of individual transactions. Even worse, completely detached, it would itself form the object of sales and loans, of pledges or speculation: these last two stages do not appear 312 among the Seksawa any more than in the neighboring groups. For 423 stronger reasons one does not observe there the supreme stage that 171

/158 cont./

312 423 171 is constituted by the auction of water, of which Brunhes has given, for the Valencian Elche, so strong a description (1).

1. Op. laud., p. 98. Other examples cited by Joaquin Costa and others, Derecho consuetudinario y economia popular de España /Consuetudinary law and popular economy of Spain/, Barcelona, 1902, t. II: the water market at Alicante, pp. 135 sq. The hila also bears the name of dula, evidently Arabic: dawla = Chl. /Shluh/ tawala. For Spain itself, perhaps it would be interesting to compare the strange measure of irrigation called hila or hilo with what our Mez'ud'a call lme ref and the a. Abdella lmcerf. The first give it a precise definition: it is "module of irrigation whose full use can be assured by the unit of habitual agricultural work," to wit, the work of one man in two days or of two men in one day.

312 182 On the contrary, what is striking in the Atlas is a prodigious organization. A discordance is even manifest between the social rhythms almost perfect, or postulating perfection, which preside over the division, and the mediocrity of the material, such as the tools. The nice equilibrium, the consummate science of the distribution contrast with the precariousness of this whole hydraulic system. The disproportion between the social constructions and the material techniques bursts forth. It surprises all the more the "European" or the "modern," whose analysis generally overlooks the meticulous harmony of the former. Thus the prestigious work by Brunhes nowhere discloses, in the section that he devotes to the Maghreb, collective modalities in the administration of the water (2).

312 114

2. Op. laud., pp. 73, 251. Is it not significant that, inversely to the preoccupations of the

/158 cont./

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/footnote 2 continued/ French geographer, Joaquin Costa, Colectivismo agrario en /this footnote is continued on the next page in the original source/ España /Agrarian collectivism in Spain/, Madrid, 1915, should give a large place to the community traits (pp. 532 sq.)? Independently of the tendencies of the work, the atmosphere of the institution seems to be rendered better in the Spanish descriptions.

On the plane of techniques themselves, it has missed an /159/ important problem, that of the utilization of accidental water. It seems that one would find in the Maghreb, in the conservatories such as the Atlas or the oases, the explanation of forms applicable to the whole Mediterranean basin, and notably to the single European sector where they have kept some fullness: this Spain which, in that, has shown itself to be obstinately faithful to the heritage of the Mussulman Occident.

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In the part of Morocco studied here, is the disproportion between the social edifice and its material substrate a trait of origin or of decadence? Does this contrast between so perfect an organization (1)

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1. Whence the inextricable difficulty of the litigations for the division of the water in the regime of European administration. Examples abound, which will not be cited. To keep us on the scientific plane, the best description that we have found and which moreover alludes to a neighboring sector, that of the Idaw Mh'mud, is given in an unpublished work (Arch. d'Imintanout) by Lieut. Oqbani on La législation de l'eau dans les tribus d'Argana /Water legislation in the Argana tribes/: attentive observation, describing curious procedures of drawing lots, but only at the stage of the result; the author seems to have missed

/166 cont./

245 the humidity that it collects. Almost constantly, a "basin," [312] tanut, plur. tuna, is arranged at the foot of the olive trees: a concave angle, outlined by a little flow-trench, takes up the descent of the impluvium, where the séguia water is not led by gravity in turns.

But no choice of the varieties of almond trees: those that scale the middle slopes, and testify moreover to a /167/ meritorious hardiness, do not result from any selection. They are [433] bastards made up of dozens of origins. Their yield is normally tiny, even though occasionally the surprise of an abundant fructification bursts forth. The risk is enormous. It enters into [426] the calculations of the moneylenders. Sale while green, called bay^{c} u-ssalam, at usurious rates, formerly drained the almond near Mogador at the same time that it supplied the rich man of the mountain with liquid money. Around the olive trees, the "suckers," ayyawn (plur. of ayyaw), are carefully safeguarded. They pass for a sign of vitality, just as an excess of foliage does: they are compared to the beard of a man. Native aesthetics opts not for the single and thick trunk, but for the thicket of shoots [242] which finally develops at each base. Of course, neither grafting nor pruning. The "oleander," tazemmurt, is left to its decorative role, and, for us, a Mediterranean reminder, for the oleolentiscetum of the botanists has almost completely disappeared; it exists only in rare patches in the region of Imintanout. Diseases and parasites ravage every planting. For everything, this rural society -- quite significant poverty -- has only one word, the bu-zegg^{w}agh, that is, "the red," and, of course, cannot help it. The harvesting is a brutal beating, which abolishes hopes for the following year. Whence a productivity generally biennial. As for the walnut trees, the stripping of the roots in the search for the sswak (cf. name of the walnut tree, tsswikt) and even premature felling ravage the plantations. The resources of the orchard are reduced to these three species. The rarity of the fig tree in particular is noticeable. And despite the altitude, no apple trees or cherry trees. Here and there, in the high mountains, some [251] peach or apricot trees. They give rise to a fairly expert canning industry, notably at Ikis.

/173 cont./
233 The flock expresses a living equilibrium between man and country. From which arises the fact that it is endowed with moral values, and probably ritual ones.

• 312 Secondly, the native techniques are concerned with irrigation. But there, as has been seen, they depend on collection rather than hydraulic creation. The energy and the shrewdness of the system for collecting the wild waters, directing them, and administering them fail and resign before any attempt tried in order to make new resources appear. It is not the lack of success in this /174/ difficult domain that should strike us here, but the relative inferiority that is revealed by it in relation to the art that the same people manifest in leading the precious liquid for some distance and according to tactics whose success astonishes us. This art of circulation carried to incredible lengths becomes no more than inertia and inconstancy in the creation.

245 As for the fruit tree (1),

[171]

1. Vidal, Principes ..., 1922, p. 83, sees an old Mediterranean idea in the primacy of shrubby cultivations. But he sees just as profoundly an even more archaic type in the arboriculture in the dry, which corresponds here to the almond tree, to the carob tree.

the native poorly succeeds in dissociating it from the forest. Certain species, which come by themselves, or are considered such, put one on the wrong scent. The general antiquity of the planting, the irregularity resulting from unnamed ailments or parasites, from the water, the wind, from chance, or from the favor of occult powers make arboriculture, at least in what concerns the walnut, almond, and especially the carob, a resource as little constructed as that of the forest. It is not the same for the olive tree, which here, as elsewhere on the Mediterrannean periphery, has its civic and almost moral value. But if one compares its techniques, the tools utilized, to what they are elsewhere, in the Tunisian Sahel, for example, the same impression of deficiency results for the Atlas.

/176 cont./

000 /The following paragraph is in small type in the original source./ "Once there was a child who went out each day. And the first object that he looked at, he became this object; the sprouts of the fields, in April and May, became a part of him, the sprouts of winter grain and those of the bright yellow maize ..." (1).

1. Walt Whitman.

But, beyond the field, there is the mountain. The grandeur of the cadre discourages all mediocrity. The narrowness of the canton forces man to adventure. But let us not go on imagining these contrasted feelings. Later, perhaps, people from here will write a literature of escape, the very one that the barbarian scholar and the emigrant worker now live in their fashion...

/177/ IV. Some Analyses of Grounds

A) Montagnard classicism: the ait Mh'nd

• 312 [634] /All of Chapter IV is in small type in the original source./ The a. Mh'nd, with Iguntar, Wanz'id', and Iwulla, are one of the cantons backed up to the abrupt barrier which, to the S., separates the Seksawa world from the Sous. From the escarpment gush perennial waters, though subject to estival diminution. Those of the a. Mh'nd, the most abundant, form a torrent that never dries up, which descends, under the walnut trees, toward Ad'erd'ur, the zaouia of Ammern, and ends up by rejoining the main valley at Tabratjut. Its opening is sometimes difficult, thus below the former village of the a. Irz'z'i, whose name, close to the root rz', "to be broken," has given rise to an etymological pun inspired by the ruiniform aspect of the rock at this place; the a. Irz'z'i, in a struggle with the Idma, are said to have had their village shattered by a miraculous collapse. Farther upstream, almost immediately below the sources, a basin spreads out: this is

[Ait Mh'nd]

/177 cont./

312 the ground of the a. Mh'nd. The sources, Walmdeyn, Talâint n-tauddwa, t. waman i-ygadern, suffer a diminution of 75% during very dry summers, such as the one of 1951. But this is exceptional. Generally the fall is not so great. A basin, Tafrawt ddu-lma, collects them and distributes them, by an ample system of séguias, to a mass of well-worked fields. The lively waves, the glacial shade of the walnut trees, and the profusion of greenery make a charming coppice in the most torrid of summers. The village, where the ikhs-s each have their quarter, faces the mountain and towers over the mowed meadows, az'mu, a theater wholly denoting an active and original community life: it is there that people dance and assemble. Dominated, as has been seen, on the side of the Sous by the E.S.E.-W.N.W. barrier of the Ighran, from the Tabgurt (3,205) to the Akyud' n-Zkkat'; communicating toward the S.-E. with the Idma and the a. H'adduyws only by the Tizi Wudud, which opens on the plateaus of the Amerdul; with the Ibuban highlands by the Tizi Uniuf; with the Seksawa by a valley with numerous constrictions, this canton has been able to develop an extreme individuality.

133 (361) [613]

General Characteristics of the Population

634 613 312 [173] It refers to a former immigration from, it is said, the Ilalen (Sous). But among the ikhs-s inhabiting the village today, only two, the a. Bakhkha and the a. Umghar, go back to this origin. Each of the two forms the essential part of two subgroups: a. Zbayr, a. Wajmirro, a duality in which the taqbilt finds tension and internal equilibrium. /178/ To these two ikhs-s are respectively added, but with less dignity and without autonomy in the irrigation distributions, four other lineages of immigrants. The organization of the ensemble presents itself as follows, as the irrigation roster expresses it, with a clearness free of ethnological preoccupations, certainly, but forced to exactitude by its practical incidences.

[Ait Mh'nd]

/178 cont./

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General division of the group	Subdivision into basic ikhs-s	ikhs-s superadded	Origin of the superadded ikhs-s	Turn for water
a. Zbayr.	a. Umghar.			One day.
	a. u Mbark.			Three days, two of which for each of the partners alternatively.
	a. Abdnnûr.			
a. Wajmirru.	a. Mençur.	a. Umzil.	a. H'ogg^{w}a expelled from Fensu a century ago.	Three days, two of which for each of the partners alternatively.
	a. H'sayn.	a. Lamin.	Demsira from Iguntar.	
		Imzilen.	Came from the Wijjan two centuries ago.	
		a. Lkut'ayn.	Ibuban.	
	a. Bakhkha.			One day.

312 N.B. The basin, called Chcharij ddu-lma, functions only from the rising to the setting of the sun. The irrigation roster covers eight days.

(613) Below, we shall find other details on the irrigation. Let us observe here and now that the order is rigorously gentilitial. The 634 adjunction of new elements, although of an antiquity sometimes 613 exceeding a century, has not at all influenced the dualist structure 173 669

/185/ Toponymy of the Irrigated Ground of the Ait Mh'nd (cont.)

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Names of quarters	Names of subdivisions of quarters		
Iger zegg^{w}aghen, "the red field."	Tigh^{w}ziwin i-ymzilen, "the fields of the blacksmiths."	Tigh^{w}ziwin n-a. Lamin, "the fields of the a. L."	Tagh^{w}zit n-ayt Lkut'ayn, "the fields of the a. L."
Dar-uzerg, "at the mill."	Ibh'irn n-ayt Mençur, "the fields of the a. M."	Ibh'irn n-a. Lkut'ayn, "the fields of the a. L." (cf. above).	Ibh'irn n-ayt Buirddamen, "the fields of the a. B."
Amettul m-Merzug, "the land of M."	Ibh'irn n-a. Bakhkha, "the fields of the a. B."	Ibh'irn n-ait Mençur, "the fields of the a. M."	
Talat n-tsettuft, "the hollow of T."	Ibh'irn n-T't'aleb ʿAli, "the fields of the T'."	Ibh'irn n-ayt H'fid u yidar, "the fields of the a. H."	Ibh'irn n Abdella, "the fields of A."

Irrigated Crops

103 What is striking first of all is the extreme toponymic density.
423 If our appellation of ground can be turned to account for the ensemble, keeping in mind the fact that it is a continuous whole, a
• [312] first differentiation by quarters appears at once. I mean here by "quarter" an agrarian unit having its irrigation autonomy. The ground of the a. Mh'nd includes some 25 quarters thus comprised. Here are the names of them: Twuttyan, Taçddut, Tighermin, Amegdul, Tawddwa, Annammeran, Ddu-wanz't't'a, Tighe dwinan, Ag^{w}dalan, Tafernut, Afud'an, Talat n-Tnghort, Tagenza, Ddu-wsderm, Wakuntuf, Ddutgomma, Ughad, Ddu w-wz'ru, Ighermanan, Dar-talmechmacht, Tifratin, Iger zegg^{w}aghen, n-dar-uzerg, 'Amtul m-Merzug, Talat n-tsttuft.

But many other names, corresponding to smaller spaces, could be cited, within the still rather exiguous cadre (about 1/2 ha. each) that the quarter constitutes. A veritable toponymic pullulation comes out between the meshes. In relation to the

[Ait Mh'nd]

/185 cont./

103 423 spacious "albur" quarter, such as Unam, the irrigated quarter, ddu waman, is very exiguous. But it is itself a vast multiple of other elementary cells, being able to go as far as the humble series of "parcels." Would it go even to the "parcel," if our study could go down so far? "Each tibh'irt has its name": such at least is the saying that one hears uttered spontaneously during this kind of inquiry. Concerning the land, however, it is necessary to state that if the "quarter" is split up into secondary names, there is no /186/ /left side of map appears here/ /187/ /right side of map appears here/ /188/ name for each tier, still less for each parcel. A variable density of names is, moreover, observed by the peasant himself. If he does not have any abstract notion of "quarter," he obviously carries it out, and the etiquette of the terms of tamazirt or ar. /Arabic/ bot'ra. One sometimes hears tighmert, put in connection with ar. rokna, "corner," doubtlessly "corner of earth." Tighmert was defined for me as designating the convex angle that the salient of the talus delimiting the tier forms, while the area thus circumscribed was called taw'z'ut, plur. tiwz'z'a, this is, perhaps: "the redan" and "the recess."

[823]

The picture above, drawn from direct information at the places, shows that, for 25 quarters properly speaking, about 80 names of lesser local units are known. That is, three or four toponymic submultiples for each quarter. But this density is very unequal. The central quarter of Twuttyan, the best irrigated, the most harmoniously placed at the heart of the ground, a privileged quarter in a sense, contains 17 names in itself alone.

Mechanism of the Irrigation and of the Crop Rotation

• 312

This whole ensemble is not irrigated by less than about 15 ditches, each having its name. Here they are: Targa umegdul, t. ti m-mkan Uchboro, t. n-a Zobayr, t. Umegdul, t. n-tuz'z'-umt, t. n-tarmin, t. n-dda-Wanz't't'a, t. n-tfarnut, t. n-tmazirt, t. g-ifdisn-an, t. n-temj'j'ut't'-an, t. Wankutuf, t. w. Ugdal-an, t. Waghad, t. n-ddu-wz'ru, t. y-iger zegg^{w}aghen, t.

[TEXT CONTINUED ON PAGE 263]

[Ait Mh'nd]

/Left side of map, p. 186 of the original source/

102
133
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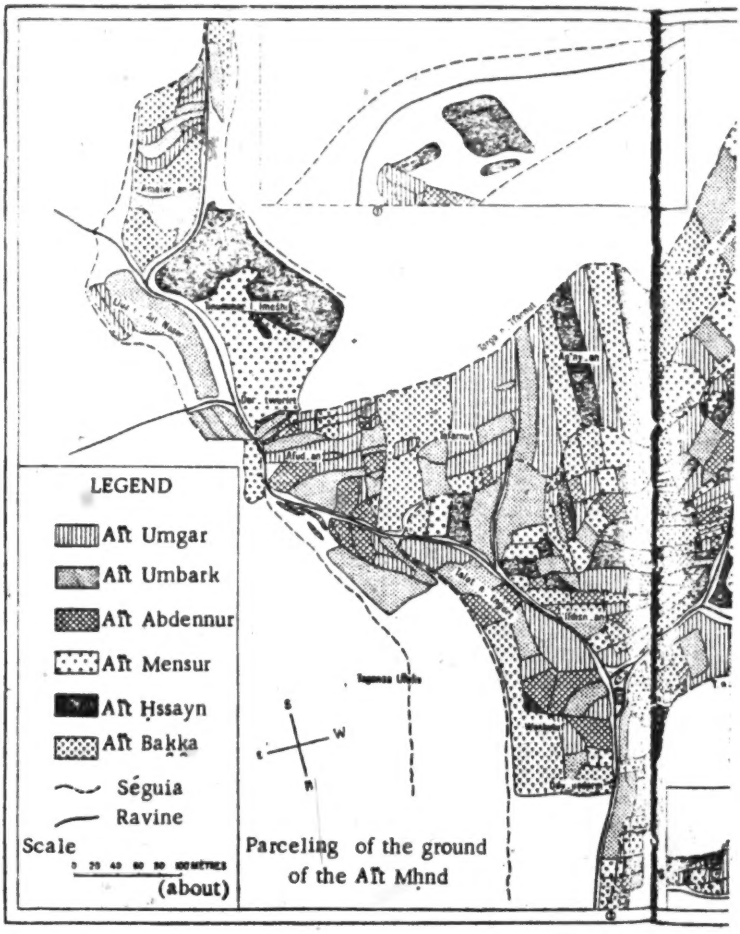

1: Berque--262 Z-5 (ca. 1950) 1955 MW11 Shluh MW11

[Ait Mh'nd]

/Right side of map, p. 187 of the original source/

102
133
• 312
423
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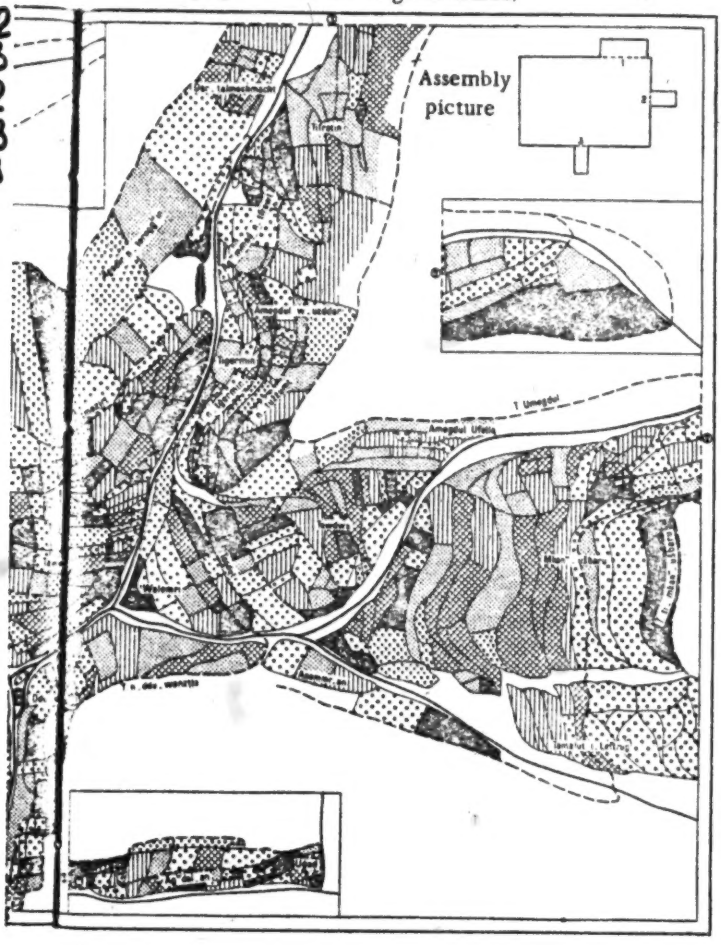

[Ait Mh'nd]

/188 cont./

312 n-dar uzerg, t. n-talat nnur (accessory, collects the streaming water).

312 423 The irrigation mechanism has been dealt with above. It only functions, or in other words the water roster, tiwaliwin, only goes into effect, at the time when the low-water level, at the beginning of the dry season, imposes regulation. Thus it is this physical factor that will impose recourse to the rhythm of distribution. Similarly, and within each portion, in case the module is insufficient to irrigate simultaneously the ensemble of those having rights, there will be a drawing of lots among them. It is [241] still this pure question of fact that will determine whether or not there is a possibility of cultivating on the stubble fields after the 242 barley harvest and of laying out the market gardens. On the other hand, what does not depend on outside circumstances is the biennial crop rotation, by alternated soles (Fr. sole, expanse of arable land intended for a certain crop in the rotation/ of barley and maize, which we see here. This movement bears on only four quarters, which are, to tell the truth, the best irrigated ones and like the heart of the ground: Twuttyan, Taqddut, Tighermin, Amegdul. The figures given above indicate that the crop rotation functions over some 25 ha., that is, over half of the ensemble of the irrigated crops.

Comments on the Parceling

613 423 Over all the expanse of the irrigated ground, each ikhs is represented by several fields in each of the quarters. Without exception. Despite sales, female inheritances, pledges, usurpations, etc., this rule /189/ still stands out from the perusal of a parceling established in 1948 (Fig. 8)[1] and about which it is advisable to state that it is the work of a young agricultural engineer uninformed about the custom and consequently not suspect a priori. In the numerous cases of the rrahn-s, he evidently noted the possessory situation. One will also observe -- and this deformation is interesting -- that the four superadded ikhs-s were indicated as being mingled with those of the basic ikhs-s, which are in a way

1, [For figure 8, see pp. 261-262--Analyst]

[Ait Mh'nd]
[Agersili]

/189 cont./

613 423 [312] their respondents: another trait of structural permanence. The informants on the scheme evidently based their own declarations on what they knew, as a. Mh'nd, on the distribution of water: confirmation of the integrally gentilitial nature which affects the latter. Finally, the figure thus obtained gives an idea that still remains below the regularity attributed by the local interpretation to this parcellary sampling of the ikhs-s among the quarters. Examination of this scheme, as it is, and subject to the above, is nonetheless conclusive.

One will observe the denser concentration of the pieces toward the center (Twuttyan and others): evidently the alternation between the soles implies that, in each, each one is represented equitably. Elsewhere, on the contrary, the parcels are more spacious. At two peripheric places (Ag^{w}nian and Mkan Uchboro), they affect a parallelism in strips, which evokes a systematic division.

B) Another case of montagnard classicism: Agersili

133 J. Dresch describes, under the name of capture of Agersili, a characteristic phenomenon of the changes in basic levels intervening on both sides of the sub-Atlas flexure. A whole ramification of valleys with a mature appearance, descending from the flanks of the Tabgurt, extended through the Inraren Z'dinin threshold into a depression with gentle slopes, the Ighzer n-Tzemzgart, toward the Ammern torrent, where it flings itself to the height of Ad'erd'ur. But the upstream system was collected by another ravine, this one abrupt, the Ighzer Wanchkrir, which seized it through a sudden denivellation, forming a cascade, and drawing it toward the main valley. The ressaut is 300 meters. It is that "the progression of the Ighzer Wanchkrir has been favored by the weak resistance of the Ordovician schists hugging the length of the sub-Atlas accident." Coming from the source of the Amerdul and from the high pastures of the Tabgurt, concentrating the moisture from the snows that cover Agersili for two or three months each year, a stream of water gushes downstream.

[Agersili]

/189 cont./

133 But, channeled by the work of men, it will not yield to the at-
312 traction of the capture. It is in the direction marked by the tectonics, that is, toward Ad'erd'ur, by following the Tzemzgart, that it is directed: art has re-established the state of things prior to the altering of the basic levels and the action of regressive erosion. Whence a very long séguia, which the streamlet of water takes, it is said, about twelve hours to flow through in its entire length.

It is the vital artery of the Idma. It serves the crops of their oldest habitat: first Asikis, with its Agersili fields, then /190/ Ad'erd'ur. Wanchkrir has always had a service less favored than [175] the two metropolises. One of the first acts of the history of the Idma was certainly to verify juridically, by transactions with the neighbors and the former occupants, a. Umgan toward the Tabgurt, a. Gasa toward the main valley, the situation of the lands and waters. Elsewhere I have given the texts of two of these treaties, dated 1702 and 1703, respectively.

133 When from the Tizi Wudud, on the North flank of the Tabgurt, one observes the downstream panorama, one has under one's eyes the very bifurcation of the history of the Idma for two or three centuries. Doubtlessly just about what was presented to the invaders from the Anti-Atlas. These places are imbued with the past, with this montagnard past which the chronicles did not know, of course, and which modern observation, before so many traits of a rustic immutability, would itself neglect, if one did [172] not take care. Among other archeological indications are crowded, in a paltry perimeter: the "boundary," tiktit, of Lalla Aziza, marking the separation between Idma and the people of Tasa on the pastures of Amerdul; the grassland, az'mu, of the ait Irz'z'i, where there took place a massacre of this old population, new Canaanites of these newly chosen; the "Aires jointes" /joined directions/, Inraren Z'dinin, threshold dominating Wanchkrir at 300 meters, sheer, and where the annual elections of chiefs took place; at the same place, an edifice of dry stone, which is supposed to be the tomb of one Lalla Azzo nt Amer, whose name plunges the investigator into great perplexity: would it not be Lalla Aziza?

[Agersili]

/190 cont./

241 133 Agersili, with its terraces descending over some 80 ha., is the most beautiful and, all allowances being made, the most colossal example of crops in tiers in this part of the Atlas. On the two faces of a ravine, the system extends over three kilometers. We shall command a better view of it by backing up to the flank of the Tabgurt, on the side of the small intermittent source called Talat wuz'ma. From here our view plunges into the axis. Toward the N.-E., on the right, there appears to us a limestone peak pointing like an arrow to the Agadir waleggu. In the background, the dome of the Tindri, which commands Ikis.

[361] On the right bank of the small valley, two villages of dry stone, Agerd'ayan, the more important, and Twurirt. What is striking in the crops at first glance is the alternation of colors, which the rotation of the soles brings about, according to the season.

311 312 The ground is divided into quarters, each corresponding to a principal intake, aqder, on each of the 11 channels, that is, from upstream to downstream: targa n-Talburt, y-imi n-tanut, ddu wg^{w}erd'an, umalu y-imi y-iz'ma, wannaimmeran on the right bank; n-tghuni, n-tsila, y-Irzzi, w-wammas, wanammer, y-imi y-iz'ma on the left bank.

634 613 423 619 This irrigated ground, about 40 ha., belongs to the Idma. A first analysis registers their subdivision into six great ikhs-s. But, although these six names are also found within the limits of the other bourgs, in general there is specialization of submultiples of ikhs, if one wishes, among these different sectors. Here, it is essentially the people of Usikis who cultivate, at the same time as lower, on the deep terraces of the village (a staircase with 200 steps), and at Imi^{w}Usikis and Tighwla in the main valley. The ensemble of these four grounds constitutes the /191/ irrigated part of the bounds of Usikis. The lion's share. At Agersili, for example, among the representatives of the great ikhs of the Iseqqalen, we distinguish: a. Lh'ajj, a. Warh'man, a. Zbayr, a. Unejjar; among those of the great ikhs of the a. Mh'nd u. Abdallah appear the Ih'chtrag, the a. bu Mh'nd, the a. Berka; among the a. Ilarzg the a. Berchman and the a. Lehri. Other subbranches will appear at Ad'erd'ur, Wanchkrir, or Tanssmekht.

[Agersili]

/191 cont./

634 619 613 This specialization by sectors seems to be a corollary of the amplification of the group. It is complementary to another rule ordering the equilibrium of the group on the space that it occupies, by the minute samplings. Thus it is that the Idma are divided into five branches. They themselves are divided into 33 ikhs-s, two of which now extinct. The average size of an ikhs [162] can thus be estimated at 13 houses, 15; 5 foyers, 67; 74 persons. Of these five branches, four are represented at Usikis, three at Ad'erd'ur. Two seem to be concentrated particularly in one village, for example, Tasselli or Ad'erd'ur. Among the ikhs-s themselves, two are represented in several villages. One, the Iseqqalen, is represented everywhere. It is evidently the dominant group.

A harmony, obeying simple laws of balanced representation, is thus recognized in the composition that prevails between the Idma and their country. But an even more refined harmony prevails in the distribution of the grounds. How, in the case of Agersili, the division of the ground into quarters is combined with that of the group into ikhs-s: this is what will stand out from the table on the following page. /See p. 269./

Comments on the Table

613 423 242 312 [126] This table with its figures was drawn up by myself, following numerous cross-checkings on the spot, one of which was made in August, 1950, in the presence of J. Dresch. It is confirmed in large part by another table, this one figurative, drawn up by a scholar from Ad'erd'ur. The native figure is based, no longer on the division by quarters, but on the service by ditches. As the quarter here has a technical definition, that is, of being served by one main sluice, the result comes out the same. Nevertheless a fluctuation in the number of parcels: 3,546 according to the first method, 3,670 according to the second one. A coefficient of incertitude of some 4% is negligible. Thus let us study the principal traits that flow from this ensemble of indices, calculable, one sees, with sufficient exactitude.

1: Berque--269 Z-5 (ca. 1950) 1955 MW11 Shluh MW11

[Agersili]

/Left side of chart, from p. 192 of the original source./

Analysis of the Parceling of Agersili

Number of parcels belonging to each of the ikhs-s in each of the quarters below

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Names of the ikhs-s	1. Talat-en.	2. Tasluft.	3. Tamsyt-en.	4. Is'mayan.	5. Ddu y-Irz'.	6. Ftaberin.	7. Talat n-tfrart.	8. Talburt.	9. Amaluylich.	10. Amalu ddu wgadir.	11. Ddu Turirt.	12. Targa wammas.
Issqqsien	88	41	152	132	110	66	44	11	73	81	46	16
a. Ilarzg	77		27	33	98	106	36	27	13	37	16	69
a. H'sayn		3	-	29	24	33			6	5	10	18
a. M'hand u Âbdellah	12	2	20	13	75	55	43	21	3	19	5	18
a Ullis.....			24	10	41	7			10	19		13
a. Wah'qqi.....			15	8	12					14	16	
Totals	177	46	238	225	360	267	123	59	105	155	93	134
Crop Rotation The initials o (barley), n (turnip), m (maize), indicate the crop cultivated in each of these quarters during the campaigns:												
1948-49.....	m	m	m	?	o	o	m	m	m	m	o	m
1949-50.....	o	o	o + m	m	m	m	o + n	o	o	o + n	m	o
1950-51.....	m	m	m	o + m	o	o	m	m	m	m	o	m
1951-52.....	o	o	o + n	o + m	m	o + n	o + n	o + n	o + n	o + n	o + n	o + n
1952-53.....	m	m	m	m + o	n	m + o	o	m	m	m	m	m

[Agersili]

/Right side of chart, from p. 193 of the original source./

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13. Ins'ughsan.	14. Firsalen.	15. Ugzug i-yml y-ir'ma.	16. F-Igtuni.	17. Amalu y-Iml n'Isnut.	18. Talaggut-en.	19. Ddugord'an.	20. Awrs i-yml y-ir'ma.	21. Amalu y-Iml y-ir'ma.	22. Talat Ungbar.	23. Wanammer-an.	24. Targa y-Irz.	25. Awrir-an.	26. Talat n-Tfrawt.	27. Alt Yus.	
6	6	5		11	27	13	10	7		56	33	50	5	12	1,095
56	57	18	46	20	11	52	9	23	35	118	9	111	80	63	1,270
			15			3		7	26	10	30	30			213
43	36	21	11	13	3	23	7	2	11	15	3	91	20	13	637
31	1				13	12		9	2	9		29	13	13	256
															65
136	90	44	74	44	54	103	26	48	74	208	75	311	118	101	3,546
?	e	o	?	m	m	e	e	e	m	e	e	e	m	e	
e+n	e+n	m	m	e+n	e+n	m	m	n	e	m	m	e	c	m	
m	e	e	e	m	m	e	e	e	m	e+m	e	m	m		
e+n	m	m	e+n	e+n	m+n	m+n	m	e+n	e+n	m	e+n	e	e		
m	e	e	m	m	e	e	e	m	m	e	m	e	m		

/198 cont./

423 794 [452] peculiar character of the returns effected by the owners on the occasion of feasts, offerings, visits. The money is shuffled here, and the investment relatively large. The budget of the group is credit. Whence purchases far away in the plain, which correlatively led to the abandonment of the high terraces and a certain decadence of the montagnard cultivations. But that is a matter of a late evolution. Let us not stop there.

423 613 592 At present, three ikhs-s, a. H'ammo, a. Lh'sen, a. Âli, are distributed in these quarters according to a sampling all the more complicated because they include nearly 40 foyers having rights, that is:

a. H'ammo. . . .	22 having rights	357 parcels
a. Lh'sen.	10 --	105 --
a. Âli	7 --	65 --

Inequality among the ikhs-s: the a. Lh'sen and the a. Âli each have no more than a few foyers: curse of the saint. Besides, the a. Âli have alienated many of their portions: economic expression of their spiritual discredit. The inequality between owners can go from the simple to twentyfold. Seven owners by themselves alone own nearly half of the total number of parcels. But the distribution of the ikhs-s, and even of many families of each ikhs, over the ensemble of the quarters is nonetheless the rule. Thus, on the 29 parcels that make up the quarter of Imi n-Zennu, one finds:

a. Âli	2 having rights	2 parcels
a. Lh'sen.	8 --	12 --
a. H'ammo. . . .	10 --	15 --
	20 having rights	29 parcels

312 423 178 613 In what concerns the irrigation, one witnesses here the phenomenon of rupture of the gentilitial order that has already been observed at Ad'erd'ur. For /199/ several years, the irrigation has been done s-içd'ar or s-tghuma, "by sluices." That is to say, by ensembles of continuous parcels. By pieces of land, and not by

/199 cont./

312 423 178 613 origins. The phenomenon is related to a recent evolution. Reason invoked: the exorbitant disproportion between the patrimonies of the three ikhs-s made excessively disadvantageous for the a. H'ammo, possessors by themselves alone of more than half, a distribution where they would have only one share of water out of three. These readjustments seem bound to intervene as soon as, for some reason, the old balance weakens. Opposed to the gentilitial order, they perpetuate in short an archaic operation of accumulation of capital. The inequality in the possession of land is reinforced by a new inequality in the use of water. This sort of management, responding to specious symmetries at the same time as to a better agronomy, always rallies the concert of the notables. Mutatis mutandis, it corresponds to the progress of the enlightenment and liberalism that broke up the old communitarian traditions in our own rural history at a certain epoch. The abandonment of the former system for the new expresses here a sort of liberal revolution.

423 178 [613] At any rate the analysis of the ground of Z'init' can leave no doubt as to the order that survives through all landed-property mutations. It perpetuates an exact representation of each of the participants of the group, ikhs-s and most often even families, in each, without exception, of the quarters that make up the ground. That is the general rule. In the individual case, it has been disturbed by evolutions -- expansions or declines -- which one can likewise connect with the myth of the saint, but which doubtlessly also reflect more prosaically the constant nourishment of the minor group of the lfoqra by the tithes and offerings. Thus are brought about by way of archaic, but curiously concordant routes, phenomena of concentration, whose working -- however, in the middle of the twentieth century, has not yet prevailed over the old landowner law.

[794]

[613] Finally, in the economic and even demographic inequality among ikhs-s, inequality more pronounced than round about, it is not exaggerated to recognize the effect of a more advanced monetarism. A greater mass of available lands has produced phenomena of consumption, circulation, and reinvestment, the

[Ait Musa Ufella]

/199 cont./

423 178 consequence of which has been to accentuate the differences in level among those having rights. This differentiation, working in a milieu with a precarious economy, has reacted on the vitality of the subject and on the rural countryside.

D) The basin of Tabratjut

634 133 This is the domain of the a. Musa of upper Ufella, just downstream from the parvis of Lalla Aziza. This location, too accessible from the plain, too vulnerable to the mountain, which besieges rather than defends it, has re-echoed on the history of land.

175 634 648 Here there was a Babylonian captivity. The captives were the "caid" Lh'sen Chtittihi and his followers. Babylon was the place of asylum of Z'init'. The exile lasted about twenty years. It was only at the time of the pacification /200/ of 1927 that, at the demand of the French authorities, the a. Lh'sen withdrew from the conquered country, which was returned to the legitimacy. But it was to fall into a landed-property litigation concerning registering, fortunately settled in favor of the indigene by our Cour d'Appel /Court of Appeals/. In sum, for a generation, the a. Musa from above saw their Tabratjut ground delivered up without cessation to the usurpations of ancient type and of modern type; eviction by stamped paper threatened to succeed conquest by the sword. And they continued only by the understanding of the judge to escape ruin definitively.

• 312 The basin forms a series of tiered esplanades, according to an arrangement of the river bed which is always found, although in a fashion unequally clear and continuous, from the bottom to the top of the Seksawa. On the Tabratjut side, the two lower levels are marked by a vegetation with two contrasting shades, expressing two planes of irrigation. Downwards, it is the "great channel," targa imqqurn, coming from the river, and constant, but insufficient. Higher, at the base of the towering reliefs, it [628] is the séguia from Aduz (Haut Dwiran), but the use of which depends on the good will of these neighbors. Thus a whole part of

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/200 cont./ Thus a whole part of the agriculture of the a. Musa depends on relations of neighborliness and propitiatory sacrifices which are made each time, in case of need, to the marabouts of Aduz. This irregularity, with phases of unconditional abundance when the ditch runs high, and of restriction or even scarcity, results in the fact that the administration of the water does not correspond to a division among ikhs-s. The water is distributed either at the discretion of each one or, in case of need, by small groups of contiguous parcels, s-irubba. No "turn" properly speaking.

Distribution of the quarters among ikhs-s
in the terrain of the ait Musa Ufella (Fig. 9)

1) List of the names of ikhs:

a) Ait Chtittihi.
b) Ait Bu-setta.
c) Ait J'j'amid.
d) Ait Watchaw.
e) Ait H'mad.
f) Ait Jjaw.
g) Imzilen.
h) Ait Si Addi.
i) Ait Wabgur.
j) Ait Umazwur.
k) Ait Wakrim.
l) Ait Mzird'ad'.
m) Ait Lkessas.
n) Ait Imij.
o) Ait Lmekhtar.
p) Ait H'sayn.
q) Ait H'med u Jibbu.
r) Ait u Châfb.

2) List of the names of quarters:

1. Tameselnt.
2. Ammayn.
3. Ddu-Wanghemmi.
4. Tkunt.
5. Targa meqqurn.
6. Agergiwn.
7. Igidar.
8. Imi n-talat.
9. Inlaln-an.
10. Tariat'i' n-Dlaali.
11. Imiri y-igwrram-n.
12. Ddu-wjjin.
13. Imi n-urtan-an.
14. Tikid'a n-ait Brahim.
15. Talat n-Teddart.
16. Lmegzart.
17. Imejjad'-an.
18. Aryad'n-an.
19. Ult-teskri.
20. Azarn-an.
21. Timejderra.
22. Igherman-an.
23. Dar u- Weswik.
24. Lemkhazin.
25. Imi n-tebratjut.
26. Iussran.
27. Ddu-wgwadir.
28. Ibh'ir.
29. Inebdar.
30. Ameslen.
31. Timzughin.
32. Tukhribin.

[Ibuban]

/207 cont./

133 [137] dangerously close. To the N. and N.-E. it is still covered by a forest of holm oaks, junipers, and lentisks, where the villages have had to clear a place for themselves parsimoniously. To the S. the lands of Iwulla almost reach as far as the village of Tugg Lkheyr, hanging over it by the Awrir i-ysemgan, "the hill of the Negroes," with colossal populations of opuntia. To the E. the country is cut not only by the valley of the asif n.-a. Lh'sen, but by the high brows of the Amuddur (2,075 meters), through the Wanz'id' possessions which advance to the north like a duck's bill to rejoin the /208/ domain of the a. Lh'sen "of below" (Awines and Buteghradin). The pasturage is so restricted, especially on the side of the Ameznir, that these schistose slopes are delimited among ikhs-s users. This notably at Tugg Lkheyr and Timskert, where this division of the sterile wasteland appears to have been pushed to its last degree and to have developed a whole red tape of documents of ownership.

233 423 613

166 Yet this mutilated sector represents a reordering, due to the intervention of the "caid" Lmokhtar, for whom one will note the topographical strategy, adroit at reserving for his what we call the lines of communication. Formerly, the a. Lh'sen of Awines had occupied the Ibuban. The present inhabitants, of heteroclite and successive origins, settled by way of purchase. But the avarice of these driven-back populations enabled them to overflow it anew on the, not political, but juridical plane. They bought lands from their neighbors from Ammern and a. Musa, in the Ilikri.

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312 [242] Nothing more precarious seemingly than this country without water. Barely two or three miserable sources, all just suitable to give drink to the villages and to support, at the price of a long-term rotation (12 days for three ikhs-s at Timskert, for example), a few poor patches of gourds and onions. The only resource is that of the streaming water. It nevertheless appears considerable in case of heavy rain. The reserves of the soil, long stored, then liquefy. One has barley for four or five years. Or one waits for the storm, rrâda, which in general at the end of August marks the time of the musêm of Tamarut, in Demsira, to "carry off" a

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[Bul^{c}wân]

/213 cont./

241 311 103 igommi ufella, Talat l-lâin, Lh'arch n-a. Belh'ajj, Agellay n-Ali u Mançur, n-a. Benjâa, Talburt, Lh'arch n-Bihi u Sâîd. These quarters follow one another on the plane of earth that goes from the ighzer, "ravine," l-H'ed to the Ighzer n-Berka u ^{c}Ali. Downstream the following quarters follow one another: Agellay n-ait Sâid, Lh'ufert n-a. Bella, n-a. Chuh'u, n-a. Bihi Sâid, Ichkajen, a. L^{c}anayt. And one arrives at the route from the Dir.

311 312 Thus, then, we have, for about 30 hectares, 16 quarters of about 2 ha. each; thus, they are spacious. On the other hand, a very important matter -- they do not always correspond to "principal intakes," içdar, from the channel. The number of the latter is very high: 28 for only the section of the Talh'archt going from one ravine to another. From these intakes depart ditches, called lmçâref here. They serve, according to irregular lines, parcels that are irregular and situated at different levels of the declivity. No correspondence between the irrigation technique and the toponymy. [103]

312 178 (624) The distribution system for the water is new; it succeeds an older one, the origin of which cannot be stated precisely. Formerly, the Talh'archt was /214/ managed on the general plane of all the ait Abdella that it serves (that is, in particular Tuz'z'umt and Ilutjan included) by an amazzel who would deliver the water according to the needs of such-and-such land. A choice necessarily arbitrary, and thus being possibly amenable to only two hypotheses: either a rigorous agrarian order, wiping out, in a functional unanimity, competition between individuals; or, on the contrary, authority of a chief replacing the village institution. We lean toward the first hypothesis. At a later time (control over the powers of the amghar by the Protectorate), this system was broken up, and the water distributed by "units," ferdiyat, according to a practice apparently widespread. The beneficiaries of these units were henceforth no more than territorial entities, such as Bul^{c}wân or Taqennurt, considered as villages. However that may be, the ground of Bul^{c}wân henceforth had at its disposal 2.5 ferdiyat: that is, 30 hours. But it is necessary to note that under these reduced proportions and within these 30 hours, the (624)

[Bulʿwân]

/214 cont./

312 118 (624) distribution was done neither according to ikhs nor according to groupings of parcels, but remained subject to the estimation of the amazzel. Neither gentilitial order nor topographic order, but, if one may say it, purely agricultural order, and subject to a troubling, or affecting, power of estimation. We again find there the incidence of political variations on the agrarian regime. Every time, the rising power judges irrational and reforms the previous practice. The amghar reacts against the community institution, and the modern administration against the amghar. But at each of these stages, a portion of the authentic organization survives. Although broken, and each time on a more modest plane.

103 The analysis of the names of the quarters provides still other indications.

First, one finds there the elements of a classification of the ground: the h'arch, "the aspre" /see p. 296/, on one hand, the h'ofra, "basin," on the other, with assignment of a part of the one and of the other to different subjects, which indeed appear as collective subjects: Ichkajjen, ait Bihi u Sâid. But the symmetry is limited to these two cases. What is more striking is that, out of 16 names, 11 express these vocations of appurtenance. The so-striking descriptive aspect of the names of quarters in the mountains is not found here, except for a fourth of the designations, which is not much.

It is difficult to conclude anything from such indications, except mixture and erosion. Nevertheless a look at the parceling of Bulʿwân, South part, appraisable at about 20 hectares, permits supposing certain regularities. The fact that the great institution 194 184 protective of the patrimonial immutability in the mountains, the habous /wakf/, is not found here is all the more suggestive. It is so rare in all the a. Âbdella that its rare appearances in the upstream villages, such as Iminteghli or Ilutjan, do not truly enter into the mores. The mobilization of the lands thus does not clash with any juridical restraint.

[Demsira]

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/footnote 2 continued/ des noms propres /For a collection of proper names/," Bulletin de l'Institut français d'Afrique Noire, 1950, p. 535; A. Roux, "Quelques remarques sur la formation des noms de tribus chez les berbérophones du Maroc /Some comments on the formation of names of tribes among the Berberophones of Morocco/," Actes et Mémoires du III^e Congrès international de toponymie et d'anthroponymie, Brussels, t. III, 1951, p. 485.

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/The following section, including subsections on the Nfifa, Mtugga, and Mez'ud'a, except for the last paragraph, is in small type in the original source./ In form and color, the
133 Demsira country resembles the Seksawa country, of which it
195 forms the exterior boulevard, on the side of the route from the
177 Sous. The tribe, thus exposed directly to the influences of an
184 important path of invasion and passage, agharas ugellid, has suf-
619 fered intensely, in its structures, from phases of order and from
[634] those of rebellion. It presents itself today as a string of cantons, stretched in the S.E.-N.W. direction, that of the route. The peak of the Bwibaun separates it from the Seksawa domain, into which, according to tradition, it formerly bit very deeply. Dispossessed of its conquests, it has even been amputated politically: its Iguntar are today subject to the a. Lh'sen. Thus it has suffered even more than the Seksawa from the action of the powers of the plain. Those of its cantons which, like the a. Chāib and a. Bkhayr, have been able to escape through isolation have lived more shabbily than the Seksawa. The latter were protected, starting from their middle valley, by a relief in /220/ depth, a resistant hagiology, and probably a historical tradition: all things which are lacking in Demsira.

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[184] This said concerning the resemblances and differences, the cross-checkings that have been brought to bear on this tribe have proved positive on a great number of points. Here are the principal ones:

[Dems ira]

/220 cont./

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[443]
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1) At Timezgadiwin, an important market between the Tizi Umachcho and Argana, the law is so present that it could serve corollarially in a judiciary investigation in the proceedings setting against the present jemâa the claim of a formerly evicted ikhs, the a. Umahal. This ikhs's turn for water and its share in all the quarters of the ground: Tassukt, Ikid'ulh'yan, Igummeran-an, Igg n-zzit n-Belâid, Ddu wknari, Tigumrin, Bukheddo, Talat, had been camouflaged by the four other ikhs-s making up the a. Timezgadiwin, but three quarters of a century of occupation did not succeed in abolishing them. Thus there were always 5 turns for water for 4 ikhs-s, no plausible explanation being alleged for such an anomaly. That in a matter which in such a milieu is always reasoned out very exactly. An error in the administration of the water: the investigation thrust itself in there and unmasked the usurpation.

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2) At Tinnmrutin, high-mountain village of the a. Châib, endowed with a relatively large ground, there exist 7 ikhs-s. The irrigated land is divided into 12 quarters perpendicular to the axis of the torrent: Ddu wrtan, Amkid'an, Ddu murgun, Igg mgun, Imi n-takt, Tikssrt, Imin-tsektan, Nggi teghla, Ddu teghla, Ughlin, Ddu wgenza, Imi n-tdkki. As a general rule, each quarter is divided among all the ikhs-s. Nevertheless inequalities of appurtenance, going from the simple to the quadruple, are observed within each quarter, between the shares of the ones having rights. They are still greater in the quarter located immediately below the village. Just as in another one, one of the 7 ikhs-s is not represented. The irrigation is done by turns of one day, falling to each of the ikhs-s. On the dry land, similar representation, although with more ample proportions and in less entanglement. Above the ditches for streaming water, that is again accentuated, and each ikhs has a sector of its own at its disposal.

The example of Tinnmrutin is all the more interesting because it touches our Seksawa, from whom the Iguntar, today attached to the a. Lh'sen, descended and still possess rights there.

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3) In the most tortured region of the Demsira, the most weakened by all the conquerors, official passers-by, claimants

[Demsira]
[Nfifa]

/220 cont./
613 423 and tools of the power of the plain, the Irohalen, region on a slope, without good irrigation, Permo-Trias reddening, the landed property distributes the ten ikhs-s, including Tamarut marabouts, over the different grounds: for example, "the field of the King," Iger ugellid, a nice cereal piece at the junction of the routes from the Sous and the H'âh'a, Awrir-an and the rounded hill below Ddusyan, reputedly fertile for wheat. A system of rents compensates for the risks of drought or of a bad harvest. In sum, sector with an eventful constitution and history, which is organized to the best of its rather precarious nature, but visibly according to the lines observed in more intact grounds.

613 /221/ 4) A. Mh'and u Musa. Narrow affluent valley of the
● 312 asif i-ymintanut. Law notably cross-checked for the villages of
[133] Ergtajelt (9 quarters), Aghella (8), Bwiugra (11). The irrigation is always administered by ikhs, but unequally, the ikhs-s having unequal rights according to the quarters. Finally, the law is felt and formulated.

... Nfifa...

619 Tribe completely of the piedmont. Occupies, besides the
[131] outlet of the col on the plain (Imintanout), the lower valley of the Amejnes and a "mountain" which is the North reverse of the Lemgo, as well as a plain on the confines of the Mtugga.

619 1) In this latter domain was observed the working of the dis-
423 tribution of land. It is the taqbilt called Wad l-Ibûr. Seven
[634] a^{c}z'âm form it, all allogeneous. Not one autochthon. One of them, the a. Ali Umbarek, has its crops grouped upstream, mixed with those of the a. Abdnnur, "people of the mountain." But the 6 others are impeccably represented in each quarter. Besides, they are the ones that are designated, excluding the former, by a collective name: a. i-ymiz'z'er. The conflict be-
[578] tween the rule of topographical distribution and possession, invoked by the a. Ali, who have all the crops massed around the source, gives rise to numerous clashes. In 1950 a transaction made allowances for things and combined the two systems to the

[Mez'ud'a]

/223 cont./

... Mez'ud'a...

619 184 Same reservations, but also same conclusions. Among them, the plain-mountain balance has been preserved up to our day. The tribe presents a homogeneity, perhaps acquired dearly, but which, its more modest proportions helping, rather makes of it the form of unfolding of types that we find, on a more exiguous model, in Haut /Upper/ Seksawa, for example. The factor [312] of originality here is the use of five large séguias from the asif el-Mâl, and which condition the economic and political life of at least the whole East part of the tribe.

631 1) A general study shows that, roughly, the Mez'ud'a plain is like the exposition and amplification of the political divisions of the mountains. Each of the latter projects its zone of ownership over a special sector. Whence constant coming and going, and today, and more and more, double habitat. This same fact is observable in the Dwiran. It has already struck our researchers.

613 423 178 2) What has remained unperceived is what degree of detail this agrarian order has reached. Despite the intense appropriation of the plain since the pacification, there remain cultivation communities where the vocation of each ikhs resists all evolutions. Again in 1950 a gentilitial distribution, in terms of the astonishingly ramified and hierarchized system that caps the ikhs-s here, was victoriously imposed, in spite of the privative vivifications, on the largest part of the Ighargharen ground coming back to the a. Gd'id'.

312 613 3) The functioning of the irrigation, a perfect clockwork mechanism, is governed, not by topographical proximity, but by group appurtenance. Whence what would appear to us as difficulties and paradoxes. Thus, it is necessary that, down to the individual echelon, for each /224/ rightful claimant whose turn arrives, there are lands available in the sector watered just at this moment by one or the other of the 5 great séguias diagonally crossing the plain, and which leave between them distances of several kilometers on occasion. There again, as in what concerns the Mtugga, it would be a mistake to pursue in detail

[Mez'ud'a]

312 /224 cont./
613 analogies which would come out false, in view of the stage of unfolding and the personal genre of the Mez'ud'a.

184 Let us moreover hail in passing these original developments which not only illustrate the vitality of each group, when it is not struck by decadence, or external troubles, but the liaison of this vitality with particular techniques. The latter are all centered, as Taine would have said, on a "master idea" of the group. Thus, they occasionally reach the consciousness not only of the experts, but of the common citizens.

128 Perhaps one now has the right to systematize some notes, only the most striking of which have been recorded above, but which one could multiply indefinitely, if one did not fear making the enumeration excessively fastidious. But would this indeed be rash? Would it not be necessary first to continue the probings over the whole extent of the Chleuh /Shluh/ world, indeed, more broadly, the Berbère /Berber/ world? We were not able to do it directly, but oral information confirms that the phenomena observed here are found at the very least on the periphery of the tribes of Imintanout, from the Gedmiwa to the Aghbar and to the
171 Idaw Mh'mud. On the other hand, it is superfluous to say that the minutiae of such analyses, involving the twin call on the toponymy, the parcellary topography, and the morphology of the groups, have hardly tempted researchers in the rest of the Maghreb (1).

1. In any case, it would not appear without interest that at the other end of North Africa, in the Aurès, the opportunities for direct investigation have permitted us to find it indeed lively.

A striking trait of the western Aurès is the parallelism of the two great valleys of the Wâd ᶜAbdi and the Wâd Labyod', which constitute two streets of peopling. Life stretches out along these natural paths, in a roughly N.E.-S.W. orientation. Thus it is with the two great rival

/224 cont./

171 /footnote 1 continued/ express an exigency of internal equilibrium. But let us take this isolated rapprochement only for what it would be: merely the bait for more extended controls. (Cf. Archives of the Sénatus Consulte at Aris.)

128 These cross-checkings /225/ thus remain to be done. Only they will be able to infirm or confirm, and consequently to endow with generality or not, the structural law that it is believed has been uncovered here.

121 The "Parcellary Orchestration" (1)

[114] 1. This expression is taken up again, while apologizing for its paradoxical aspect, from the article of 1948, where we set forth our first verifications.

181 Let us return to the Seksawa of the high valleys.

423 Their whole life is marked by a very precise division bearing
613 on three orders of facts. The ground is divided into individual-
ized quarters. Time is scanned by the succession of "turns" or-
[805] ganized for irrigation, and the latter is not only an essential
[312] economic base, but a collective symbol, fixing the most vehe-
[592] ment aspirations of these rural people. The group is divided into ikhs-s, themselves distributed in conjugal families, but preserv-
ing a role, or rather assuming attributions. There prevails among these three orders of things an exact correspondence.

182 Easily decipherable in the present state, and despite degradations
423 and mutations, it inspires and maintains the deportment of the
613 montagnard, for whom it is at the same time an inveterate or-
ganization, guarantee of persistence, and ideal of legitimacy.
[671] The local land law in this part of the Atlas has no aim other than
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to safeguard, against all causes of disturbance, and against individual life in general, these correlations.

It is thus explained that, to the astonishment of the agronomist, the order of irrigation is gentilitial. Contrary to what economy of effort and the elementary concern to reduce losses due to infiltration and evaporation would impose, it is not the piece of terrain made up of an ensemble of contiguous parcels that will profit from the turn for water, but the discontinuous domain of an ikhs: as dispersed, as distant on occasion as its fields may be, on that day the irrigation must skip over important intervals in order to go from one to the other. This discontinuity itself is the rule, because, in each of the quarters, each ikhs must have its share. All sorts of conservative mechanisms thereupon come to limit the possibilities of landed-property mutations: sales or successions, /226/ violent dispossessions. In the present state still, wherever the ground is flourishing, the techniques well preserved, the commune lively, this rotation of the water and this distribution of the parcels tend toward perfection. Whence it comes that the classic form of the property is neither the ample piece lying together nor even the cluster of neighboring fields, but a patrimonial sampling. The average cultivator has a hundred parcels at his disposal, each of which is sometimes reduced to a few square meters. The formula is not viable from an economic point of view. But what does it matter to the montagnard? He has, according to the expression of the native documents, "his name in every quarter." A distributive ideal is thus attained. It is also an ideal of variety. The parcels are defined by their fitting in among those of others having rights. The smallness of the areas helping, their limitation is not material, but personal, not topographical, but anthroponymic. That emerges clearly from local writings, where they are defined by the name of the quarter and of the four borderers, without any other precision of boundaries. The appurtenance to the ikhs and the insertion in such and such a quarter provide sufficient identification. A paradoxical trait in a peasant society where boundary conflicts are traditionally frequent.

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423 312 613 A whole "parcellary orchestration" is thus glimpsed here, each ikhs putting at the same time in all the quarters of the ground its fields, which, the day having come, the exact time-switch of the turns for water animates. Scansion of agricultural time in turns for water, internal equilibrium of the group in agnatic subgroups, classification imposed by the understanding for the ground: these three elements are combined in a coherent system.

[829] What origin to ascribe to such a perfect arrangement? The user himself does not imagine the cause of it. His spontaneous gesture, when one interrogates him on this law, is to point with his finger at the interlacing of the cane in the mat where he is seated: each sprig corresponds to a parcel. What he has an intuition of, in fact, is an ensemble linked by inextricable solidarities. But that is a feeling. Research must be more demanding.

121 [191] The first explanation that would come to mind is that of these divisions of inheritance which, in two milieus paradoxically far apart, end in the open field /the words in italics are in English in the original source/ and the strip fields of the European North, the muchāc of Syria, samplings of the same type. But what creates the difficulty, and at the same time the interest of the Haut-Atlasic example, is that the taqbilt is not in any way an enlarged, even fictive, family. The social link, indeed avowed and conscious, does not at all consist here in the ramification of a /227/ family stock. If, within the ikhs, the attachment of the different "foyers," takatin, to one another is genealogical and amenable to the successoral law, it is completely different for the attachment of the ikhs-s between themselves within the group: their connection, which it will be necessary to define more closely, is entirely different. It is necessary to look elsewhere than in divisions of inheritance for the source of an agrarian order.

619 634 [613] [592]

121 [423] An original collectivism, which might more or less maintain itself in the Atlas? The hypothesis is tempting. To tell the truth, it calls for a judgment on the age and the character of these societies. On the other hand, it runs counter to what we know

103 /228/ expresses exactly that of the other works. It is even the easiest indication to grasp. The density of the names designates that of the communal life. In such villages we follow it indeed beyond the cadre, still restricted, of the quarter. There is nothing that says that elsewhere or in other times it could not be followed even further: down to the smallest parcel. This ground is thus like a body where each atom would assume, besides its function, a name. What levity of matter in all that!

423 The essential notion of quarter escapes almost any topographical definition. In the irrigated at least, where the quarter is not a piece of landscape identifiable by natural accidents. In order to answer to this definition it needs large epaulement terraces where dry crops and pastures spread out. Certainly, even in the irrigated, it has an area approximately measurable, varying with the grounds. Whoever says area should say limits, readable for the naked eye. Often, in fact, the quarter corresponds to a physiognomy. Now its minuscule individuality results from traits such as the strength of the crops, the hue of the vegetation, the assemblage of the parcels, which one feels instinctively, but which, let us be careful, proceed from this individuality rather than determine it.

423 312 It is possible that the progress of the analysis will succeed in giving an account of the more or less large number of quarters, that is, in the case in point, of sluices echeloned along the ditch, by the echeloned working of the irrigations. Or that roughly the division of the ground yields, as in the case of the parcel-strips of the open field, to a concern to equalize the parts qualitatively. The embanked relief would have made an irregular checkerboard preferable to a geometry of long rectangles. But none of these explanations by topography, technique, or distributive equity succeeds in completely accounting for the notion. What is incontestable is the disproportion that thus asserts itself within the ground between such a profusion of appellations and such a poverty of mass.

121 423 [103] This contrast is certainly general, and characteristic of the milieu. But the density of the names, itself announcer of the social density, is it the same everywhere? Even though this might touch upon a matter that has hardly been explored in North Africa.

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121 423 and which would call for irrelevant quantitative comparisons, one nevertheless suspects, in the limited cadre of the western Haut-Atlas, great inequalities between grounds. Consequently, have we not risked basing our description excessively on the limited case of the irrigated ravine, while other aspects, visually broader, also decisive economically, likewise call for analysis? /229/ And, on the other hand, what inexactitude would there not have been in imagining that the montagnard reality presents itself everywhere with equal rigor!

Phenomena of erosion or of disuse can, even in the irrigated, bring on the collapse of the system. Above all, it is the juridical inextricability, itself resulting from a weakening of the communitarian life: in the complexity of the old gentilitial formula the [178] young generations were no longer met with again. Weary of war, a jemâa agreement substitutes, for the former devolution of water by ikhs, a watering by contiguous pieces.

But beside this factor of more or less great integrity of the montagnard type, another, doubtlessly of major importance, intervenes: its degree of spread in space.

423 184 243 [312] [181] [613] [492] If one turns one's attention from the valley land in order to put it on the high surfaces for rye, for example, one finds that two essential elements are missing for verifying the structural rule that we have defined: no division of time into turns for water, and for reason; and fewer minutiae in the toponyms. The life of the heights is less willing, less refined, looser. The simultaneous implantation of all the ikhs-s is more theoretical than real. For this agriculture, distant from the village, requires means of transport, the harness or at the very least the beast of burden. It is not within the reach of all. Not all risk it. It is an agriculture of representative ambitious ones, not of egalitarian citizens. Operating in a social milieu less finely innervated, if I may venture to say it, deprived of this permanent exercise of will and equilibrium, and also of this measure of time that irrigation constitutes, it correlatively puts up with a haziness of the law and a haziness of the techniques: irregular fallowings, returns to wasteland, abandonment of an overly poor harvest, submission to the hazards of the snowfall and of the pluviometry.

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613 approaches the plain or as the system is worn away. But perhaps
184 even more in terms of the geographical breadth of the phenomena studied. Thus analysis leads here to the idea of variations in the space, to which we shall have to return.

171 The Coefficient of Value (1)

1. H. Lhote, Comment campent les Touareg /How the Tuareg camp/, 1947, p. 21, notes the clear division of the course among the Saharan Touareg, contrasting with its promiscuous character among the Sudanese Touareg.

312 In many cases, the division of the water by turns intervenes
423 only in a period of low water. Another method is established when the waters are high. The distinction of these two rhythms
[177] of abundance or of low water is, moreover, a constant motif. It governs the relations between Seksawa and downstream beneficiaries, Dwiran and Ud Besseba[c]. Correlatively, scarcity brings into play, this would be in the matter of pasturage, narrow divisions. Thus, in Ibuban, at Tugg Lkheyr and at Timskert, the compression of the villages by the arête of the Ameznir, where the territory of the a. Mh'and begins, entails this extraordinary thing: the division of the pasturage by "cairns," lkraker.

829 Certainly, other causes can intervene. Thus this condensation /231/ of toponymy and also of human interests and work, even of affectivity, which characterize, in relation to the vast extent of mountain spaces, the tillage ground and its heart: the irrigated ground. In all the cases, a common element prevails: that of the value /Fr. prix/ attached by these men to such and such of their goods: land for cultivation, water, or pasture, in terms of its narrowness, its rarity, or other elements more obscure for us. This perspective of rarity is, in relation to the great arable stretches of plain, such as in Chaouia or in Tadla, very characteristic of the Atlas. Another consequence of the evolution

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794 184 But these diverse characteristics originate at the stage of rustic exchanges between villagers and saints of grounds: and it is at this stage that they may best be analyzed.

Seasonal Rites, Collective Pacts, Individual Contracts

796 Habitat of the sacred: personal or simply communal sanctuaries. Rhythm or phases of the sacred: these periodic renewals marked by agapae, pomp, and sacrifices. Finally, accountancy of the divine: here is a very important third element, perhaps the most striking, and which impresses on the institution a cachet of specific ratiocination and avarice. And although it plunges into collective apprehension and depends narrowly on the recurrence of natural phenomena, it manifests itself under the aspects of individualism and conscience. There is something very remarkable there: the liturgical periodicity, itself linked to the agricultural periodicity, terminates in a contract. [241] [221]

794 212 875 The old jurists from the Sous, who make themselves the echo of quarrels among hamlets for the recompense of the fqih or the repairs on the communal mosque, raised the question of the obligation of the Friday prayer in the case where several hamlets or "bicoques" /shanties/ (in the etymological sense) have together only one mosque, which is not close to any of them. The liaison of this institution with the taqbilt, which is distributed in a plurality of habitat, furnishes an interesting historical suggestion. [634]

[312] [423] Another characteristic that one might draw from these jurists is the liaison of the recompense of the fqih to the turns for water, that is, to sum up, to the agnatic order (1).

[465] 1. Ajwiba said to be from "Bennâçer," that is, from the sheik Ibn Nâçir of Tamgrût, ms. zaouia of the Mez'ud'a, p. 54, l. 7 sq. The salary of the fqih is fixed on ayyâm dawlat ᶜuyûni-him. The ar. /Arabic/ dawla, "turn," corresponds to the chl. /Shluh/ tawala. But is there derivation?

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311 182 423 Let us return to the Seksawa. The field is indeed an object: it is linked to a name, protected against expropriation by neighbors, that is, by other names. It persists for centuries in the same onomastic co-ordinates. It is indentified, on the affective and juridical plane, with its rightful claimants. Finally it is the practical and individualized sum of habitudes of production. If one embraces a cadre larger than that of the parcel, one finds that most of these characters are joined in small ensembles: quarters. The parcel is in fact too tiny to constitute a natural unit. From that, it is not an estate /Fr. fonds/, but the abstract submultiple of a patrimony. On the echelon of the quarter, on the contrary, a unit does come forth. It asserts itself as the point of convergence of several elements. Among them some are intelligible to the usager: the toponymy, the visual aspect, indeed the very ones that proceed from deliberate practices: irrigation and, sometimes, crop rotation.

/412/ Others come into play, obviously, of which the local consciousness is unaware, and which only the specialist begins to perceive. Thus for all sorts of agrologic components. These factors escape the Chleuh /Shluh/ peasant and are therefore, in the immediate, without direct social import. But they offer, with the first, the common character of beginning to play their determining role beyond divisions overly minuscule. A certain coefficient of mass is necessary for them to assert themselves.

423 182 They will affirm themselves more and more to the extent that the superficies are large. Their role will prevail all the more over that of the forces that preponderate on the humble echelon of the parcel. There, on a hundred square meters, and sometimes even less, man reigns by his abstract limitations, his juridical interdictions, his will. From the quarter, on the contrary, and even more on the echelon of the ground, the conjugation of the natural bases and of the technique ends in concrete syntheses. It is of them that the rural landscape is made. They strike the eye all the more as the cadre becomes larger.

[312] In the irrigated, the physical reality of the quarter, measuring, for example, half a hectare, is already revealed to the informed

/412 cont./

312 423 182 eye, who can follow the cutting up of the principal séguia by the successive trenches. In the dry, the notion of quarter is enlarged to that of ground. In fact, the use of water no longer intervenes to impose so extended a differentiation of the landscape and of work. Correlatively the toponymy, which, in the irrigated, would be confined, would refine divisions and subdivisions, describes in the dry no more than very broad meshes. This changing of rhythm, linked to the agricultural technique, constitutes an important sign. The comparison of structures collected from the upper cantons with the immense deployment of the Mez'ud'a or the Mtugga furnishes another one.

423 182 But let us leave the fertile avenue that is open here to research, in order to evoke -- if only for a moment, and only for the fine antagonism of the types -- the Latin fundus, with its individuality, its name, its mass: veritable syntheis of notions of patrimony, parcel, quarter, and ground. The economy of the high valleys permits one to observe the play separately. It thus permits analysis of it. The individual patrimony is dissolved into a sampling of parcels encased in the different quarters constituting the ground. The parcel is not a unit. It is a fraction. Several causes are undoubtedly responsible for its evanescence: want of economic consistency, lack of mass, excessive and exclusive liaison with human data. The parcel, if one wishes, is the atom of this rural world, but so /413/ paltry and so little charged with material that it is reduced almost to a purely social definition.

It is not the same for the quarter. It is a veritable collective object, for it consists of the assemblage of representative shares of the gentilitial elements of the group. To neglect such a character would be to abstract and mutilate a communitarian genius that alone explains and supports the institution. But the quarter is not only an object. It is above all the meeting place of the object aspect and the factors aspect. In it are conjugated the social forces and the natural conditions. It is at the junction of the group and the soils. In it a bundle of family names is compounded in order to be enclosed in a toponym based on a fragment of landscape and a concourse of agrologic elements. Thus, the Twuttyan

1: Berque--645 Z-5 (ca. 1950) 1955 MW11 Shluh MW11

Pl. II /Left side of plate./

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Z'init Panorama

The green-roofed sanctuary of Lalla Aziza (1) is surrounded by the tall houses of the foqra. On all sides, steep slopes rise, toward the peak of the Tamjlocht (2) and the high brows of the Mzawt (3). On the right bank of the asif i-yseksawan a barred spur with the ruins of a citadel of the ait Gasa (4). It is the Agadir n-a. Hammu. /Continued on p. 646./

1: Berque--646 Z-5 (ca. 1950) 1955 MW11 Shluh MW11

/Right side of plate./ Pl. II

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/Continued from p. 645./ -- Names of quarters: (5) Imdz'z'an; (6) Ighzer u Lh'h'yan; (7) Iunghasen; (8) Imi n-tssukt; (9) Ddu Tgumma; (10) Takriwin; (11) Amkuk; (12) Tighersiwin; (13) Tibh'irin; (14) Lfessat; (15) Imlalnan; (16) Tawunkht; (17) Ddu y-ikid'o; (18) Akhferga; (19) Ftchalacht; (20) Ddu Tizzirgi; (21) Ftelmechmacht; (22) Igad'iyin; (23) Talat i-ylâ (ravine). -- The bottom of the valley is about 1,100 meters in altitude.

1: Berque--651 Z-5 (ca.1950) 1955 MW11 Shluh MW11

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(Photo by airplane, by I. G. N.)

The ground of Agersili:

/The complete caption for Pl. VI is given on p. 652./

142 Plate V: Seksawa women.
222 (1) Young mother carrying her baby. Note (2) the pectoral,
291 tifilit, and the frontal, tawunza, made from small pieces of
292 silver. This jewelry is most often part of the property of the
301 woman, and of her contribution to the household, jihâz; (3)
302 little girl returning from the spring. The top of the cranium is
415 shaved until the little girl is nubile; (4) ah'wach of young girls:
462 finery of tassels of red silk and of foulards hanging down in the
854 back; (5) the gathering of wild or subspontaneous plants, for the
857 nourishment of man or livestock, constitutes an important part of the activities of the woman.

133 Plate VI: The ground of Agersili.
241 The winding white line at the bottom of the photograph is
312 the present trail, and the mountainous wrinkle toward the top,
487 the one that ends at Awrir Uluggu. Ravines on the right descend from the counterforts of the Tabgurt and end, on the left, at a capture, with a waterfall, called Aguni Wanehkir. The two slopes of the central ravine are notched with terraces. One sees distinctly, at the limit of the irrigation toward the bottom of the photograph, the winding dark line of the great left-bank séguia called Targa n-Tsila or T. Umerdul: after having cleared Agersili, it cuts across the trail (last winding line on the left) in order to go to the side of Ad'erd'ur. On the right bank, the two villages of dry stone, Tawrirt and Agerdayan, are almost confused with the surrounding rocks. The smoothed reliefs at the bottom of the photograph are those of the Chaif Aqqiunan, which are joined to those of the Tasila. At Agersili 27 large irrigated quarters are crowded on a section of ravine of less than two km.

1: Berque--653 Z-5 (ca.1950) 1955 MW11 Shluh MW11

Pl. VII

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Terraces at Tasa

The furrows and sheltered beds arranged for the distribution of the water are distinguished on the lower tier.

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133 Atlantic to form two promontories and delineate the two bays of Agadir and Cape Guir. Farther to the north, one no longer finds high peaks, but only vast calcareous plateaus terminated toward north and east by abrupt cliffs, between which wind the deep gorges of the dry wadis. Still farther, toward Mogador, they are the dry hills of the Haha, whose appearance /19/ brightens only [137] on the banks of the Oued Qsob. The forest of argan trees and tuyas /thuyas/ stretches from south to north over the whole country from the mountains to the banks of the Tensift. The sadness and solitude that prevail there further add to the general desola- 361 tion. Life brightens up only in the hollow of the wadis, at the 133 points where the water crops out for an instant; then poor villages [137] crowd one another on the steep banks, while in the gorges of the wadis thick clumps of palm trees enlaced with vines come out of the ravines. Elsewhere, on the plateaus, springs are almost ab- [312] sent; each Berbère /Berber/ builds a house on an isolated hill and [241] digs cisterns; in order to till, he clears the surrounding forest, burning the trees and brush over large areas.

133 There is no difficult obstacle, especially in the north and in 167 the west of this country, that can stop the passage of tribes that 619 have come from the Sahara or from the Anti-Atlas, driven toward the Gharb /Rharb/ by famine. Accordingly, this far zone of the Atlas is peopled in large part by families originally from the south. In the same way the Berbères /Berbers/ could not offer any lasting resistance to the passage of the Sultan's harkas coming from the north. The Haha, reduced to obedience long ago, have thus become the faithful servants of the Empire, and they have fought to make its power respected as far as the plains of the Sous, of the Chtouka, and of the Ait Ba ᶜAmran. The Ida ou Tanan alone, having taken refuge in the most inaccessible part of the territory, have tried to preserve their liberties by staying away from the roads of the Makhzen /makhzan/.

133 The mountain of the Sirwa, which the valleys surround so as 103 to draw a vast circle traced by the Zagmouzen, the Tifnout, the Tidili, the Imini, and the ravines of the Aït ᶜAmer, also constitutes a natural refuge, whose appearance is indeed such as to

/198 cont./

*634 616 174 131 The frontiers of these small states are not actually always determined by geographic accidents; often they run capriciously on the fertile plateaus, in the irrigated valleys, project in a point without apparent reason, and seem to us to be much oftener the limits of expansion of the small groups of families that constitute the "taqbilt" rather than the natural barriers that contain them.

[361] Moreover, we can verify the same balanced distribution of the two leffs on the steep slopes of the south versant of the Haut-Atlas /High Atlas/ among the Ida ou Zeddagh and the Aït Semmeg; here, however, no geographic division appears to us any more to separate from one another these groups of hamlets established on the inclined flank of the mountain or in the vicinity of springs. It is the same in the region of the Sirwa and the plateaus of the Azilal of the Aït Waouzgit, where the villages press around streamlets of water that have escaped from the volcanic plateau and are separated by immense desert spaces, the same again on the plateau of the Souktana, bereft of natural internal frontiers suitable for separating the "taqbilt." Nevertheless the tribes in these regions are divided into fractions united in two chains of alliances whose appearance is identical with the leffs of the Gedmiwa of the high mountains.

Finally, as we have seen, the divison of the country into opposed cantons, regularly alternated, is still more marked on the passage of the great natural routes of communication and of the valleys such as the Asif Nefis, the Zagmouzen, the Tifnout, as if the absence of geographic boundaries between the Berbère /Berber/ communities had, on the contrary, the effect of reinforcing their respective oppositions and of /199/ distributing the small states in a still more perfect manner between two balanced leffs (1).

• [312] [578]

1. Under the circumstances, one could invoke for the irrigated valleys the discords that the use of the water usually entails (compare our study on Massat, Hesperis, 1924, p. 362). It might be that the very frequent disputes that arise from the use of the séguias may have

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*634 616 174 131 *[312] [578]

/footnote 1 continued/ played an important role in the formation of the alliances, for the region of the middle or lower course of the wadis. This argument, however, is worthless in the high mountains where irrigation problems are unimportant and easy to solve.

*634 616 578 174 619

History and ethnography throw only very feeble light on the origins of the Berbère /Berber/ alliances of the Haut-Atlas /High Atlas/. One will not be surprised that this institution has never been, in spite of its importance, described by scholars. Ibn Khaldoun /ibn-Khaldun/ scarcely tells us, while reporting the struggles that set the chiefs of the Gedmiwa, of the Seksawa, and of the Hintata against one another in the fourteenth century, that it was only a matter of wars brought on "by the ordinary causes that introduce discord between neighboring tribes, namely: the proximity of their territories and the memory of their former disputes" (2).

2. Ibn Khaldoun, Vol. II, pp. 267-268.

This is enough for one to suppose that it is a matter of struggles between leffs, but we should like to find some more precise information from the pen of the only historian who would have liked to make known the life of the Berbères /Berbers/.

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Nevertheless, El Beidaq, in his valuable list of the Almohade fractions at the time of the Mahdi (3),

3. El Beidaq, Documents inédits d'Histoire almohade /Unpublished Documents of Almohade History/, p. 63.

gives us some interesting information. The Gedmiwa, he tells us, include 46 fractions: the Aït Yalmazdog -- vanished today, then the "Banou Masifra," "who pass in review first"; next, the "Inad Ghertit," "who are mountain Gedmiwa." Thus we see figuring in

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/341 cont./

175 favorable occasion presented itself, of revolting against an often
*631 intolerable domination. One therefore will find at Tagontaft,
712 from the beginning, high towers, thick ramparts, large courtyards surrounded by stables in which the horsemen's mounts can be sheltered, large storehouses in which provisions for several months are assembled, in order to be able to withstand a long
[312] siege if necessary. An aqueduct collects water from a nearby spring and brings it up to within the walls; watch stations in the /342/ vicinity complete the defense, and if, in a period of disorder, the alarm is given, the heavy gates of the fortress will be closed in the blink of an eye, the battlements will be filled with guns, and the big bolt will be pulled from the inside on the two leaves until the danger is past.

Later the chief has new chambers added, superposed on one another without any preconceived plan, according to the neces-
[595] sities of the moment. He ceaselessly needs new rooms for his more and more numerous wives; larger rooms for receiving transient guests, sheiks, or subjects coming from all parts of a ter-
[574] ritory always being enlarged. Although he himself lives simply, most often sleeping on a mat in a dark passage, the new kaid nevertheless has built, in order to receive guests of note fittingly, a few sumptuous rooms naïvely decorated with crude luxury, in which the desire of the Berbère /Berber/ parvenu to show off his wealth to the montagnards clearly appears.

Moreover, the fortress, planned first of all for war, soon becomes too confining and no longer suffices for the exigencies of a large command. At the edge of a watercourse, in the middle of the most fertile fields gained from the enemy, the subjects of the kaid build him a new casbah with less martial walls, with larger and more ornate rooms. Talat n Yaqoub will become the favorite residence of Si Tayeb Gontafi. Nevertheless, if war again threatens and it is necessary to find a refuge behind solid ramparts, a fortress especially intended for defense will be erected on the top of a nearby hill. Such a one is the Agadir n
[333] Gouj, near Talat n Yaqoub, which moreover has remained unfinished, but which was constructed with care, with the advice of

343 712 [178] /305/ Among the Ichkajen Imi, a single agadir remains in use, that of Azar; another one, which is found at Arg, has been in ruins for eight years. Finally, there are still three occupied agadirs among the Ait Dris: those of Amassa, Tajelt Oufella, Meggount; others have been in ruins for a long time at Akhferga, Amdros, Kormad, and Kakt.

These agadirs are of two kinds. There are those that serve solely as storehouses, these are the most numerous; others are used both as storehouses and as réduits for defense in case of attack on the village. The latter are, in general, more spacious and have a rather extensive place in the interior, permitting the old men, women, children, and animals to stay in shelter while the able-bodied men occupy, for defense, the few storehouses pierced with battlements and the terraces. There is [312] always a cistern in the interior of these agadirs-fortresses. In this category are included the storehouses of Talmakant, Assaka, and Azar.

[333] In general the agadir is built with schist, which gives good slabs, rendering the construction easy: the stones are put together with a clay mortar. The walls are thick, blind, and high. The general shape is square or rectangular, except at Ikis, where [351] one finds an oval agadir. The terraces, jutting out, as everywhere in the mountains, are storied, given the slope of the terrain and the constant height of the walls. In the interior a series [417] of narrow passages gives access to the different storehouses; from these passages rise ladders formed simply by a tree trunk grooved with notches on which one places his feet. In front of the door of each storehouse situated in a story, a little platform projects out, which affords room for supporting the upper part of the ladder coming from below and for placing the lower part of the ladder, giving access to the higher story. These platforms are also useful to the owner of the storehouse for stopping before entering his room. Each chamber has only one door and no window.

343 712 124 [671] [178] We were unable to obtain information about any written rule of customary law concerning these agadirs. It is nevertheless practically certain that very old ones do exist, especially among

/311 cont./

343 712 621 423 625 Agadir of Tizzirt (Fig. 19). -- Belongs to the village of Tizzirt (50 hearths). Certain inhabitants own up to five chambers there.

Same arrangements and operation as at Ankoutouf.

[562] The guard is usually a man. As an exception, this job was entrusted to a widow in 1928.

Agadir of Annoums (Fig. 8 and Fig. 20). -- It belongs to the village of Annoums (65 hearths).

[465] [685] [184] Five stories, all 80 chambers occupied; the guard receives a kharrouba of barley per chamber and per year. In case of theft, the custom is the same as for the agadir of Ankoutouf.

Agadir of Tamjlojt (Fig. 21). -- It belongs to the village of Tamjlojt (45 hearths). Sixty rooms, four stories. The guard receives one tmen of barley and one kharrouba of maize per room [465] [562] and per year. As an exception, this post was given to a woman last year.

Agadir of Talmakant (Fig. 16). -- It belongs to the village of Talmakant (40 hearths) and comprises 52 large rooms on two stories. [312] It can serve both as storehouse and as réduit for defense in case of attack, because of its cistern and its interior arrangement.

[682] /312/ It is in ruins in part; it has not been used any more for 25 to 30 years because an assassination was committed there.

Agadir of Assaka (Fig. 17). -- Like the preceding one, it served both as storehouse and as fortress.

[669] It was destroyed in part following internal struggles in 1925, and it is planned to put it back into condition. It serves at pres- [727] ent to shelter the numerous exiles who returned to the tribe after the submission and found their houses demolished.

Agadir of Azar (Fig. 18). -- It belongs to the village of Azar (28 hearths).

It normally serves as storehouse and in troubled times as fortress. The rooms are mortgaged for 5 to 20 douros. The [465] guard, changed every year, collects a kharrouba of barley, one kharrouba of maize, and a pound of almonds.

Fig. 16. -- Agadir of Talmakant.

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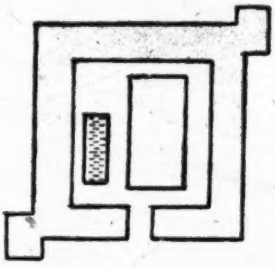


Fig. 17. -- Agadir of Assaka.

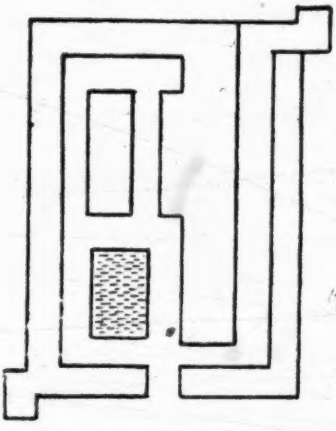
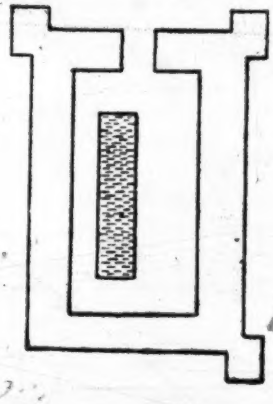


Fig. 18. -- Agadir of Azar.



4: Hoffman E-4 (no date) 1967 MW11 Shluh MW11 (ca. 1900)

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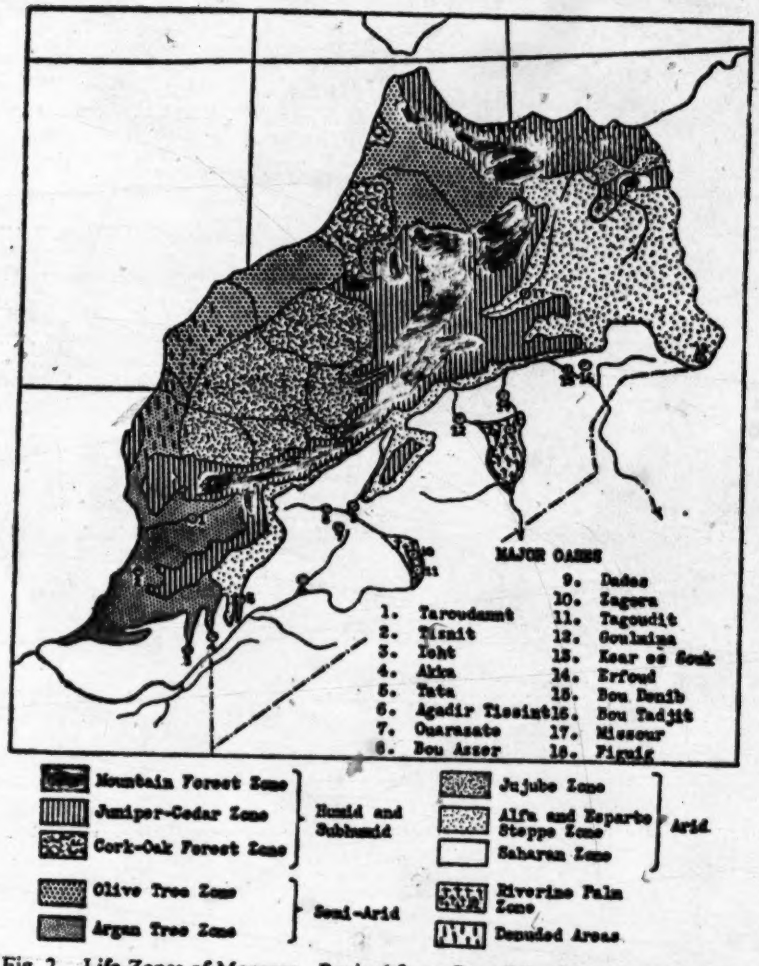

Fig. 2. Life-Zones of Morocco. Revised from Grandidier (1943, Map V) and Joly (1948, Fig. 28).

storehouses (*tighremt* or *agadir*). The pattern[1] varies considerably, however, depending upon the local environmental conditions. In the high mountains, specifically in the juniper-cedar and mountain forest life zones, where relatively low temperatures and high rainfall occur, such groups as the Seksqoua (see No. 559, map: *Tribes of Morocco*), Mesfious (594), Ait Quaouzouit (626-645), Ida ou

[1] [i.e., the agricultural pattern--Analyst]

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4: Hoffman E-4 (no date) 1967 MW11 Shluh MW11 (ca. 1900)

generally not sufficient to permit this elsewhere. Dwellings usually consist of one-story houses made of mud and stone, with the rooms built around a courtyard. Surrounded by cactus, they are apt to be grouped closely together to form a hamlet or even a compact village; these villages usually have communal storehouses (Adam, 1951; Domenech Lafuente, 1946, pp. 83, 90-91, 121-143; Great Britain, 1919, p. 170; Jannes, 1953, opp. p. 64; Johns Hopkins University, 1956, pp. 63-64; Joly, et al, 1949, fig. 30; Mercanton, 1954, pp. 13, 15; Montagne, 1930, pp. 46-48; 1930, particularly figs. 1, 12, 14).

South of the Ifni enclave the argan tree zone is bordered by the Saharan zone; to the east, along the foothills of the Anti-Atlas, it encounters the western-most extension of the alfa and esparto grass steppe. In both the Saharan and steppe zones the effect of increasing aridity is to still further inhibit agriculture and emphasize nomadism. The entire region is, in fact, a zone of transition from the sedentary agriculture of the Shluh to the camel nomadism of the Arabic-speaking Berber-derived Regueibat (766-767). Shluh extend as far south as the Saguia el Hamra, but in the south they are much mixed with Arabic-speaking tribes and no boundary can be drawn with any accuracy. Representative tribes include the Skoura (648), Zenaga (657), part of the Ait Imerhrane (618-645), Oulad Jellal (658-660), Ida Oublal (661), Ait Lahsen (737), Ait Oussa (745), and Beni Izarguine (747). The tribes north of the Dra are concentrated in the oases and reside in fortified villages (*ksour*). Agriculture is confined to irrigated areas along riverbanks or in the oases, and consists of the cultivation of wheat, barley, corn, olives, almonds, fruit trees, melons and vegetables; it is often carried on by members of the depressed Harratine group. Many of the tribes also own large numbers of camels, oxen, goats, sheep, horses, asses and mules, which they graze on the desert steppe to the south. As one passes from north to south Arabic speech and nomadism become more and more prominent, but the correlation is not exact. The Imerhrane, Skoura and Zenaga are all Shilha-speakers, but the Imerhrane are partly sedentary and partly nomadic, while the Skoura and Zenaga are completely sedentary. The Oulad Yahya (652), Ida Oublal, and Ait Oumribet (681) are bilingual; the first

4: Hoffman E-4 (no date) 1967 MW11 Shluh MW11 (ca. 1900)

as the *'adat* or *'urf*, the distinction between these two words being somewhat confused. Customary law is consulted in all civil cases (such as disputes regarding terrain, water rights, inheritance, etc.), and in minor criminal matters – the customary law having been replaced by a French-sponsored penal code in most aspects of criminal law since the establishment of the Protectorate. This customary law is established and revised by the local representative councils of each region; it may be administered either by them or by a designated arbiter (*annezzarfou*), this arbiter being required to have a great knowledge of the local law, and to be an intelligent and experienced man highly regarded by all. If possible, he should be a stranger to the group involved, or else divorced from its mundane affairs by virtue of being a holy man (Johns Hopkins University, 1956, pp. 231-232; Loubignac, 1942, p. 281).

The most important aspects of the *azrif* are water rights and (formerly) penal crimes such as theft, abduction of women, adultery, wounds, blows, and murder. Water rights are still carefully regulated by the *'urf* or customary law of each group. Among the Beni Uriaguel (99), for example, the *qanuns* or edicts of customary law dealing with irrigation carefully take into account the nature of flow in different rivers. Thus, on the Lower Rhis, in the Plain of Alhucemas, where the flow is constant but not altogether sufficient, the *qanuns* state that any man who purchases land must buy his irrigation turn independently. In the case of the Nekor River which is extremely erratic, the *qanuns* provide that the purchaser of land is automatically entitled to irrigation water, because most of the year there is sufficient quantity for all. Throughout the Berber areas litigation regarding water rights is kept at a minimum through the existence of water administrators (known as *amazzal*, pl. *imazzalen*, among the Shluh) who distribute the irrigation water in accordance with the recognized rights (Hart, 1954, pp. 56-57).

In its application to criminal acts the Berber *azrif* was characterized by great dependence upon oaths and upon the imposition of fines. This first feature (oaths) was the principal reason for the Berber court usually meeting in a mosque or at a market with an associated shrine, for in all cases the litigants swear by something to give efficacy to their oaths, and this is generally something which has